REPORT RESUMES

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MULTICATEGORICAL EVALUATION OF PERFORMANCE IN CLINICAL
PROBLEM-SOLVING TESTS. FINAL REPORT.

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THIS PROJECT ATTEMPTED TO DETERMINE IF NUMERICAL SCORING SYSTEMS FOR CLINICAL PROBLEM-SOLVING TESTS COULD BE DEVELOPED WHICH WOULD MEASURE THE EFFECTIVENESS OF DIFFERENT INSTRUCTIONAL METHODS IN TEACHING CLINICAL PROBLEM-SOLVING SKILLS. THE PROJECT WAS TO VALIDATE AND CROSS-VALIDATE THE SCORING SYSTEMS BY TESTS OF POPULATION SAMPLES OF KNOWN DIFFERENCES IN CLINICAL PROBLEM SOLVING SKILLS. DATA WAS DEVELOPED BY FIRST MODIFYING AVAILABLE TESTS WHICH REPRESENT 1900 SEPARATE BUT INTERRELATED ITEMS. THESE WERE ADMINISTERED TO MEDICAL STUDENTS. ONLY ONE AREA OF TESTS WAS PARTIALLY COMPLETED. ANOTHER ASPECT OF THE PROJECT WAS THE DEVELOPMENT OF SCORING. THE THREE TYPES OF SCORING ARE DIAGNOSTIC PROCESS, DIAGNOSTIC PRODUCT, AND THERAPEUTIC PRODUCT. A PANEL OF CLINICIANS WAS ASKED TO ALLOCATE EACH ITEM IN THE DIAGNOSTIC PRODUCT SECTION OF EACH TEST INTO ONE OF FIVE CAREFULLY DEFINED CATEGORIES FOR ALL STUDENT RECORDS AVAILABLE. THE PANEL WAS THEN ASKED TO ASSIGN EACH PATTERN OF SCORING IN THE DIAGNOSTIC PRODUCT SECTION OF EACH TEST INTO ONE OF FOUR CATEGORIES AND WITHIN THESE CATEGORIES TO RANK THE PATTERNS IN ORDER OF COMPLETENESS. A SIMILAR PROCEDURE WAS USED FOR SCORING THERAPEUTIC PRODUCT. THE RAW DATA OF STUDENT RESPONSES ARE GIVEN IN A LIMITED EDITION OF SUPPLEMENTS TO THIS REPORT. TALLIED EVALUATIONS FOR INDIVIDUALS ARE APPENDED. (AUTHOR/IM)

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Final ~~INTERIM~~ REPORT
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MULTICATEGORICAL EVALUATION OF PERFORMANCE IN CLINICAL PROBLEM-SOLVING TESTS

January 1968

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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Multicategorical Evaluation of Performance in Clinical Problem-Solving Tests

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ABSTRACT

This is a report of an attempt to determine if numerical scoring systems for clinical problem-solving tests could be developed which would measure the effectiveness of different instructional methods in teaching clinical problem-solving skills. The scoring systems would have to meet criteria of clinicians' expert judgments realistically and discriminate between experts in clinical problem solving and those who are, in varying degrees, less expert.

The project was to validate and cross-validate the scoring systems by tests of population samples of known difference in clinical problem-solving skills from medical students to resident physicians and to fully trained clinicians.

The procedure followed was first to develop data by modifying tests available. These clinical problem-solving tests represent over 1500 separate but interrelated items. They were administered to population samples ranging in skill in clinical problem solving from sophomore medical students to senior medical students.

Due to a failure of the U.S. Office of Education to take up the option of the second year, only one area or group of tests (Tests A, A', and A̲) was even partially completed.

The second aspect of the project was the development of scoring. The three types of scoring were Diagnostic Process, Diagnostic Product, and Therapeutic Product. In scoring Diagnostic Process, a panel of clinicians was asked to allocate each item in the Diagnostic Process section of each test into one of five carefully defined categories for all student records available. In scoring Diagnostic Product, the panel was then asked to assign each pattern of scoring in the Diagnostic Product section of each test into one of four categories and within these categories to rank the patterns in order of completeness, if possible. A similar procedure was used for scoring Therapeutic Product.

Unfortunately, the development of final weights was not accomplished due to the shortened schedule. However, the raw data of actual student responses used in sorting are given in a limited edition of supplements to this report, and tallied evaluations for individuals are given in appendices of this report.

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LIST OF SUPPLEMENTS

(Limited Edition - Copies available for loan only)

SUPPLEMENT 1

PAGE (Supplement 1)

I. Test A (N = 306)

- A. Diagnosis (N = 306)
  - 1. Pre-Test (N = 48), 3rd year, Medical College of Georgia, 2/7/66, 24 students; 4/11/66, 24 students 1
  - 2. Post-Test (N = 258)
    - a. 3rd year, Medical College of Georgia 11/8/65, 22 students; 1/17/66, 22 students; 5/23/67, 93 students 25
    - b. 4th year, Medical College of Georgia 5/23/66, 31 students; 5/22/67, 90 students 94
- B. Therapy (N = 306)
  - 1. Pre-Test (N = 48), 3rd year, Medical College of Georgia, 2/7/66, 24 students; 4/11/66, 24 students 155
  - 2. Post-Test (N = 258)
    - a. 3rd year, Medical College of Georgia 11/8/65, 22 students; 1/17/66, 22 students; 5/23/67, 93 students 179
    - b. 4th year, Medical College of Georgia 5/23/66, 31 students; 5/22/67, 90 students 248

SUPPLEMENT 2

PAGE (Supplement 2)

II. Test A' (N = 191)

- A. Diagnosis (N = 191)
  - 1. Pre-Test (N = 22), 3rd year, Medical College of Georgia, 10/3/65, 22 students 1
  - 2. Post-Test (N = 169)
    - a. 3rd year, Medical College of Georgia 5/24/66, 92 students; 11/1/66, 12 students; 1/16/67, 11 students; 3/17/67, 12 students; 5/12/67, 12 students 12
    - b. 4th year, Medical College of Georgia 5/23/66, 30 students 82
- B. Therapy (N = 191)
  - 1. Pre-Test (N = 22), 3rd year, Medical College of Georgia, 10/3/65, 22 students 97
  - 2. Post-Test (N = 169)
    - a. 3rd year, Medical College of Georgia 5/24/66, 92 students; 11/1/66, 12 students; 1/16/67, 11 students; 3/17/67, 12 students; 5/12/67, 12 students 108
    - b. 4th year, Medical College of Georgia 5/23/66, 30 students 178

SUPPLEMENT 3

III. Test A (N = 233) PAGE (Supplement 3)

- A. Diagnosis (N = 233)
  - 1. Pre-Test (N = 22), 3rd year, Medical College of Georgia, 11/29/65, 22 students 1
  - 2. Post-Test (N = 211)
    - a. 3rd year
      - i. Medical College of Georgia 12
        3/14/66, 24 students;
        5/16/66, 24 students;
        11/1/66, 12 students;
        1/16/67, 11 students;
        3/17/67, 12 students;
        5/12/67, 12 students
      - ii. State University of Iowa 60
        3/31/66, 10 students;
        5/2/66, 10 students;
        6/2/66, 11 students;
        7/11/66, 13 students
      - iii. University of Vermont 83
        5/16/66, 42 students
    - b. 4th year, Medical College of Georgia 104
      5/23/66, 30 students
- B. Therapy (N = 231)
  - 1. Pre-Test (N = 22), 3rd year, Medical College of Georgia, 11/29/65, 22 students 119
  - 2. Post-Test (N = 209)
    - a. 3rd year
      - i. Medical College of Georgia 130
        3/14/66, 24 students;
        5/16/66, 24 students;
        11/1/66, 12 students;
        1/16/67, 11 students;
        3/17/67, 12 students;
        5/12/67, 12 students
      - ii. State University of Iowa 178
        3/31/66, 10 students;
        5/2/66, 10 students;
        6/2/66, 11 students;
        7/11/66, 13 students
      - iii. University of Vermont 201
        5/16/66, 40 students
    - b. 4th year, Medical College of Georgia 221
      5/23/66, 30 students

INTERIM REPORT

I. INTRODUCTION

A. PROBLEM AND BACKGROUND.

1. Problem-Solving Behavior.

In the past decade, it has been generally recognized that problem-solving behavior involves skills which are difficult to define and are measured very imperfectly by conventional multiple-choice tests of the type commonly used to measure content or knowledge. It has been observed, for example, that an expert knowledge of electronic theory and instrumentation is not synonymous with expert ability to diagnose and correct malfunctions in electronic equipment.

2. Testing for Skills.

Efforts to test realistically for problem-solving or "trouble-shooting" skills have led to the development, in industrial and military training programs, of complex testing equipment duplicating as nearly as possible the conditions under which the trainee must perform his problem-solving procedures. Paper tests to measure "trouble shooting" skills have also been developed. For many industrial and military areas, there are tab-item tests which attempt to represent the problem-solving process on paper. Perhaps the best known of these are the erasure type tests of Van Valkenburgh, Nooger and Neville, Inc.

3. Medical Field Evaluation.

In the medical field, testing for proficiency in problem-solving skills has taken various forms. Examples:

a. Oral examinations in which the student is presented with portions of a case presentation and must solve the problem by requesting appropriate additional information from his examiners.

b. "Programmed patients" in which the student is presented with a "patient" who is in fact a professional actor who has been specially trained to simulate a limited repertory of diseases and to evaluate the student's skill in diagnosis.

c. Tab-item tests adapted from their military and industrial origins to specific problems of patient care.

4. Difficulties to Date.

Of the methods in use to evaluate medical problem-solving, the first, the oral examination, has the disadvantage of being unreliable; the second, the "programmed patient" is limited by the general unavailability of specially trained actors and actresses and the limited number of diseases which are appropriate for them to simulate. The third method, the tab-item test, appears to avoid some of the disadvantages of the other two methods and permits more objective recording of the subjects' performance in clinical problem-solving.

B. DESCRIPTION OF CLINICAL PROBLEM SOLVING.

The steps involved in clinical problem solving are complex and highly variable. They may, however, be divided into three phases: 1) finding the patient's problem or problems, 2) defining the patient's problem or problems, and 3) formulating plans for management, treatment, or disposition.

1. Finding the Problem.

Although it is often necessary for the physician to carry out the phases of clinical problem-solving concurrently, even in emergency cases he must first obtain sufficient information to find and identify the patient's problem. He starts with a minimum of information, often no more than a single complaint, and then collects further information from history, physical examination, and various diagnostic tests and procedures. Often, the patient's problem is obvious and easily recognized; in other cases, much information must be obtained and evaluated in order to detect the problem. Although there are many acceptable sequences for collecting this information, it is not a random process; certain sequences are unacceptable because they are relatively unsafe or inefficient.

2. Defining the Problem.

For the majority of clinical problems, a surprisingly large amount of information must be collected and evaluated to define the patient's problem precisely, and to rule out complicating conditions. In the history and physical examination alone, the workup of the usual medical or surgical patient calls for collecting and evaluating information in 50 or more different categories. The more information the physician collects about his patient, the more selective he must become in his acquisition of further information, the more he must call upon and apply his fund of specialized medical knowledge, and the more careful he must be to obtain this information in a safe and efficient sequence, especially in his choice of diagnostic tests and procedures. In this process of identifying and defining the patient's problems, he must decide when he has collected enough information to proceed with formulating a plan of therapy or disposition for the patient. The decision "How much information is enough?" may vary from the evaluation of only a few items in extreme emergency situations to well over a hundred.

3. Formulation of Plan for Management.

The process of planning the management, therapy, or disposition of the patient's problems, once they have been defined, is also complex and difficult to describe. Often, several therapeutic modalities must be considered (Examples: psychotherapy or counseling, drugs, surgery, radiation therapy, expectant observation, etc.).

For each of these, the risks of the plan of treatment must be balanced against the possible benefits to the patient. Often, a choice which can be represented on paper as a simple "yes-no" decision involves the processing of scores of items of highly specialized and often conflicting information before a decision is reached which permits the physician to respond overtly. For some patient-management problems, the entire plan of management will involve only one or two such decisions. For other patients, appropriate treatment requires a series of therapeutic trials carried out concurrently with gathering and evaluating further information about the patient's response to the trials.

C. TAB-ITEM TESTING.

1. Objectives of Tests.

Several institutions have developed and used tab-item tests in the medical field. Each has differed in the objectives of the testing programs.

a. National Board of Medical Examiners. In their Part III examinations given at the end of internship, they have used tab-item tests to help screen out candidates unfit for medical licensure.

b. Center for the Study of Medical Education of the University of Illinois College of Medicine. They have used tab-item tests as part of comprehensive final examinations of senior-medical students who are candidates for the M.D. Degree. They have used these same tests to expose apparent deficiencies in performance of physicians in practice and apparent deficiencies in training programs for medical students, interns, and resident physicians.

c. Loyola University at Chicago. Rimoldi has used "The Test of Diagnostic Skills" chiefly as a research instrument to investigate the problem-solving process itself, comparing the performance patterns of medical students in various years, interns and residents in training, and physicians in practice.

d. Medical College of Georgia. Wilds and Zachert have used tab-item tests to compare the effectiveness of different programmed texts in teaching clinical problem-solving skills in gynecologic oncology to junior medical students.

2. Formats.

The tests developed by these four institutions differ markedly in their formats and in the emphasis placed on different parts of the clinical problem-solving process. This is to be expected in tests developed for divergent testing purposes. The tests share, however, three common characteristics.

a. They are capable of representing the clinical problem-solving process realistically, with a wealth of complex detail.

b. They have great face validity, and hence appeal strongly to medical educators in clinical fields.

c. They have scoring systems where rationales are more relevant to administrative ease than to maximum accuracy in representing the skills they purport to measure.

3. Uses.

A tab-item test which is realistic and has great face validity can be constructed relatively easily in any of several formats by an expert clinician who has little training in test construction and evaluation. The great appeal of this type of test in medical education has led to a rapid increase in its use in several critical areas:

a. Several State Boards of Medical Examiners and the National Board of Medical Examiners are using tab-item tests to evaluate candidates for medical licensure.

b. The tab-item tests of the University of Illinois College of Medicine have influenced the planning for continuing education of practicing physicians at both regional and national levels.

c. Rimoldi's work, comparing the diagnostic skills of physicians in practice with those of medical students, has helped bring about reappraisal of the methods used in medical school to teach clinical problem solving to students.

4. Objectives of Scoring Systems.

This project has been concerned chiefly with developing scoring systems for tests used to measure the effects of different teaching methods on student performance in clinical problem solving, rather than to measure or certify the competence or incompetence of individual students in these skills. It was clearly beyond the scope of this project to determine the predictive relationship between the scoring of tab-item clinical problem-solving tests and the ultimate criterion of improved problem-solving performance in clinical practice.

D. SPECIFIC PROBLEM.

1. Tests Developed.

At the Medical College of Georgia, Wilds and Zachert in an unanticipated dividend from their work on the Office of Education Project "Effectiveness of a Programmed Text in Teaching Gynecologic Oncology to Junior Medical Students" found it necessary to develop tab-item tests to measure their students' performance in applying their knowledge of tumors of the female pelvis to specific problems of individual patients. During the Summer and Fall of 1964, 9 such tests were developed and were administered throughout the year 1964-65 to the 92 members of the junior class of the School of Medicine. Each student spent approximately four hours working through eight such examinations at various scheduled times. The examinations were also administered to physicians in residency training programs in obstetrics and gynecology and to certified specialists in obstetrics and gynecology on the faculty.

2. Performance Patterns.

During the year's use of these tests, it was repeatedly demonstrated that patterns characteristic of medical students at the beginning of their training differed considerably from those of medical students further along in their clinical training, and differed markedly from the patterns of resident physicians completing their clinical training, and of medical school faculty members who were expert clinicians in the field of the patient's disorder. Among the expert clinicians on our faculty who reviewed the performance patterns of students and physicians who had taken the test, there was general agreement that they could recognize the patterns of other experts and the patterns of resident physicians in training, and that these could be distinguished easily from the patterns of most students. On an item for item basis, however, the "expert" patterns appeared to vary almost as widely as did the patterns of the beginning medical students.

3. Evaluation by Expert Clinicians.

It seemed clear that the judgment of expert clinicians was essential to the evaluation of performance in this type of test. The expert clinicians were of the opinion that most of their important judgments could be expressed only in verbal terms and could not be reduced to numerical concepts requiring the notion of interval and ratio scales. For example, in considering the management of a patient with a painful incurable disease, how does one express in numerical terms decisions which must be judged on how they alter the intensity, timing, and type of human suffering? Their judgments, however, tended to express in verbal terms the notion of ordinality, which is of course a numerical concept.

4. Steps in Development.

It was recognized that in the evaluation of performance in clinical problem-solving tests, many unexplored steps lay between the expert judgment of the clinician and the development of a programmed scoring pattern prepared for a computer which will eventually score all tests.

a. Use of Clinical Experts. The services of expert clinicians are required to construct tab-item problem-solving tests in clinical medicine and are also required to pass judgment on the performance of those who take such tests. A test may consist of 200 or more interrelated items. The interrelationships are complex and require a large amount of knowledge which may not be apparent on inspection of the test itself. An item which appears in the test as a simple "yes-no" decision may, in fact, require the weighing of dozens of items of information learned outside the test before a knowledgeable decision can be reached. A conscientious and expert clinician who is familiar with the problem should be able to make a verbal judgment on any item or combination of items in the test, but he is unlikely to have either the time or the professional confidence to translate this judgment into a numerical scoring system.

b. Use of Test Construction Experts. A psychometrician working with clinical problem-solving tests may recognize that the scoring patterns which are meaningful to the clinician usually require a specialized medical knowledge which is outside the psychometrician's field of competence. If he interrogates the physician sufficiently on any one point, he may learn that what the clinician calls "clinical judgment" or "experience" actually is based in a large measure on quantitative information which can be verified in the medical literature and with which other clinicians are in general agreement; and that many of his decisions and judgments, nevertheless, are based upon data which appear to defy direct comparison in numerical terms. For example, even if a group of clinicians agreed that a specific therapeutic decision involves a choice between: 1) a 95% chance of severe reactive depression, versus 2) a 50% chance of prolonged physical suffering, versus 3) a 10% chance of sudden death, the information, though expressed quantitatively, calls for the comparison of entities which are not comparable. In scoring the test, the psychometrician will have to learn to use the clinicians' judgments expressed verbally in such terms as "this is the best pattern, this is the next best, this is the worst," etc.

c. Clinically Valid. Once the psychometrician has the clinical expert's verbal judgment on each item or pattern of items in the test, he must with a minimum of help from the clinicians develop a weighted numerical scoring system for the test. Ultimately, the numerical system must be referred to the clinical experts who must judge whether or not the scoring system and numbers are an acceptable translation of their verbal judgments of the problem and its solution.

d. Discriminately Valid. If the scoring system accurately reflects the diagnostic and therapeutic skills which it purports to measure, the test should be able to distinguish between populations known to have widely different skills. It should, for example, be able to distinguish between "chance" scores of non-medical personnel and the scores of medical school students with some experience in the diagnostic workup of the patients. It should distinguish between students and senior resident physicians whose specialized training is in the field concerned with the problems of the patient in the test, and the performance of senior resident physicians with equivalent clinical experience in other medical disciplines.

E. RELATED RESEARCH.

Very little research in the development of scoring systems for tab-item problem-solving tests analogous to those used in clinical medicine has been reported in literature. In the past five years, however, at least four groups have been actively at work on the problem.

1. What Options Should be Measured?

a. The National Board of Medical Examiners.

For the Part III examination given at the end of internship, Dr. Edithe Levit and her co-workers have developed tab-item examinations designed to measure proficiency in specific skills such as the selection of appropriate laboratory data and selection of appropriate plans of therapy in the management of specific problems in clinical practice. Tests tend to be linear in format. The sequence in which the student is given access to new information is carefully controlled; students take essentially similar paths through the test and their decisions at any one point are based upon a similar acquisition of exposure to the information and may therefore be compared on equal terms. Such a test seems appropriate when one's objective is to measure the student's competence under conditions which give him no option but to perform at his best.

b. The College of Medicine of the University of Illinois.

Christine McGuire and her co-workers have developed "patient-management" examinations which are "branching." The student is given a portion of a case presentation and then is asked to choose the additional information he needs to solve the patient's problem. He may ask for more history, more details of the physical examination, or various routine and special laboratory studies and procedures. He has random access to all this information; he also has the option at any point in his information-gathering to bypass gathering of further information and proceed directly to the treatment of the patient's problem. Tests of this sort, by making the student rather than the examiner decide "how much information is enough," add a dimension to the testing procedure which was excluded from the National Board of Medical Examiners Part III tests. The physician in practice must determine for each patient "how much information is enough." There is disagreement as to whether a measurement of the tendency to bypass collecting essential information should be included in the evaluation of professional competence. The examinations of the National Board of Medical Examiners exclude this option; the tests of the Medical College of the University of Illinois emphasize it.

2. What Scoring System Should be Used?

a. Item Scoring. Both the National Board of Medical Examiners and the University of Illinois College of Medicine have resorted to scoring systems weighing each item positively or negatively on a simple scale of five points or less such as:

+5 +4 +3 +2 +1 0 -1 -2 -3 -4 -5

or

+4 +2 0 -1 -4

This type of scoring system has the advantage of convenience and permits easy translation of the data to punch cards or other methods of mechanical processing. The system, however, necessarily distorts the importance of different parts of the problem-solving procedure. Whenever diagnostic and therapeutic skills are lumped together to be measured as a combined skill in "clinical problem solving," "patient management," etc., relative weights must be assigned to each item of diagnosis and therapy. At present, there seems to be insufficient objective information to justify such relative weighting, whether it be equal or unequal. If the diagnostic process is adequately represented by the large number of items which must be evaluated in a real patient, the test will necessarily be heavily weighted in favor of the diagnostic process, and the handful of items in the categories of diagnostic product or therapeutic product will be under-represented in the student's final score. Differential weighting fails to solve the problem. If the therapeutic sections of the tests are given an emphasis to match the diagnostic information-gathering sections by the expedient of giving the few items of therapy very heavy individual weights, the scoring pattern of the test is distorted because the individual items are no longer being scored on a comparable scale.

b. Pattern Scoring.

When item scoring is used, the assumption is made that the whole is equal to the sum of its parts and that a subject's skill in "clinical problem-solving" or "patient management" can be measured by adding together his score of differentially-weighted items in the test. In the gathering of clinical information, this assumption is sufficiently accurate to permit tests to be constructed which measure diagnostic skills without too much distortion. In the sections of the test which call for formulating a diagnosis and specifying plans of management, however, the whole is greater than the sum of its parts. It becomes essential to use pattern scoring in which patterns or combinations of items are given weights, and the weight of each individual item varies depending upon the pattern of other items which have been chosen. Pattern scoring seems essential to the development of a numerical scoring system which can represent different aspects of clinical problem solving with equal accuracy.

3. What Criteria Should be Used?

a. Rimoldi.

Working at Loyola University with "The Test of Diagnostic Skills," usually a 50-75 item case presentation concerned with the diagnostic process, Rimoldi found that the junior medical students selected more items, especially in the interview phase of the test, than did senior students, who in turn selected more items than physicians. It appeared that subjects with greater clinical experience tended to restrict the scope of their investigation of the problem earlier and to dismiss more items as irrelevant to the problem than did subjects of less clinical experience. Rimoldi, using the performance of physicians as his criterion of diagnostic proficiency, concluded that "irrelevant questions are those that are never or very seldom asked by physicians." His scoring system for the diagnostic process is complex, but it would appear to be based on the assumption that an expert performance in a test of diagnostic skills is one in which all the relevant questions are asked and none of the "irrelevant" ones are asked.

b. Ultimate Criterion Studies.

Studies of actual performance of physicians in private practice conducted in North Carolina by Peterson, and confirmed by Clute working in Ontario and Nova Scotia, have indicated that the principal performance deficiency of the physicians they studied was the failure to gather enough relevant information about their patients.

i. The physicians' history taking tended to be inadequate or unrelated to the patient's problem and was often omitted altogether.

ii. The physicians' performance in physical examination was usually inadequate and the parts of the body related to the patient's complaint or problem were often not examined at all.

iii. The physicians' collection of confirmatory laboratory information was usually omitted; and when laboratory data was requested, it was often inappropriate to the patient's problem. There was an inverse relationship between the number of laboratory studies ordered per patient and the number of medications prescribed.

c. Current Training Evaluation.

Competent professional care of patients requires the use of screening procedures, involving history, physical examination, and laboratory tests, all of which lead to the collection of much information which, at the time it is collected, is of unknown relevancy to the patient's problem. In both undergraduate and in graduate medical education, it would appear that behavior leading to the use of "screening" questions, examinations, and procedures in patient care should be encouraged or reinforced. The findings of Peterson and Clute suggest that the performance of physicians trained in the past are an unsuitable criterion for current training methods. A scoring system, if it is to evaluate current training procedures in clinical diagnosis and treatment, should be based on current training standards and should not rely for its criterion upon the performance or products of earlier training systems.

4. How are Test Scores Related to Clinical Experience?

At the Medical College of the University of Illinois, McGuire and her co-workers employed a panel of clinical experts to rate each item in each "patient-management" examination in a simple five point scale (See Section E2, Part a, Paragraph 1). The weighting of each item was thus based upon expert clinical opinion rather than on the actual performance of clinicians taking the tests. Data from unpublished reports and personal communications have indicated that when the tests were administered to appropriate groups of medical students, interns, residents, and physicians with years of clinical experience in private practice, there was no significant positive correlation between the duration of the subject's clinical training or experience and the scores he attained in the "patient-management" examination.

The tentative findings of this study require either the conclusion that clinical training and experience do not improve a physician's performance in the management of patients, or, more likely, that this improved performance is not demonstrated in the tests or reflected in the methods used to score the tests.

F. RELATED RESEARCH AT THE MEDICAL COLLEGE OF GEORGIA

1. Background.

a. Problem. Early in 1964, the developing of a programmed text to teach "application" forced the recognition that general proficiency in "application" called for separate proficiencies in a variety of distinct but interrelated skills which had to be identified and taught by special strategies and formats. It was also recognized that the oral examinations were too imprecise to measure certain proficiencies in "application."

b. Tests Developed. In order to obtain more precise measurements of these skills, a set of nine patient-management examinations was developed during the Summer of 1964 to supplement the program of special oral examinations. A description of the tests, a sample test and answer sheets are attached to this report as Appendices A, B, and C.

c. Format. The tests make use of a new format, but borrow freely the techniques and principles of Van Valkenburgh, Nooger and Neville, Rimoldi, and McGuire. In these tests, the student is given an opportunity to take a history, do all or any part of a general physical examination, and other diagnostic studies and procedures in whatever sequence he sees fit.

2. Method.

a. Process. In most cases, he may collect data from more than a hundred different items. In each test, he is then asked to define the patient's problem in detail specifying the patient's exact diagnosis, the extent of the disease, and the various complicating and subsidiary diagnoses. He is also asked to select from as many as fifty possibilities a sequenced plan of treatment appropriate to the patient's problems as he has defined them.

b. Presentation. During the academic year 1964-65 at the Medical College of Georgia, each junior student worked his way through eight of these tests. Three were given as pre-tests at the beginning of the clerkship, and five were given at the end of the clerkship as a post-test. In addition, eight resident physicians in obstetrics and gynecology were administered the tests.

c. Scoring. Four senior resident physicians in obstetrics and gynecology served as a criterion group and developed a trial scoring system for these tests. Each item was weighted on an individual basis and there was only a minimum of pattern scoring in the diagnostic product and therapeutic product sections of the tests.

3. Results.

a. Groups.

i. Residents. With this trial scoring system it was found, after laboriously hand scoring each test, that the residents all took different paths through the tests but achieved uniformly high scores.

ii. Faculty. Faculty members also took the tests and received variable scores.

iii. Junior Students. Junior medical students at the beginning of their medical training received scores which averaged less than 20% of the scores made by the residents. Junior students at the end of their clinical training made scores which approximated those made by the faculty.

b. Appraisal. Close study of the scoring system established by the residents indicated that the residents had a much narrower view than did the faculty of what constituted appropriate patient care in each case, and that they tended to penalize nonstandard approaches to diagnosis and therapy with great severity. The hand scoring of the more than 100,000 clinical choices made by the medical students during the year is far from complete. Tallies have been made on the information-gathering sections of four post-tests containing such sections administered to groups of students in the Spring of 1965.

Table I on Page 14 summarizes these results. The experimental group had been given a special programmed test in clinical problem solving. In its choices of history and diagnostic items, the experimental group was consistently more thorough and also more selective than the control group in its diagnostic workup of patients. The superiority of the experimental group to the control group in other sections of the test requiring a correlation of diagnostic information and the formulation of a plan of therapy was even more marked, but because the lack of a sufficiently flexible system of pattern scoring for these sections penalized many students in each group, the difference was of questionable validity.

4. Evaluation.

The principal value of the trial scoring system was the experience it provided in laying the groundwork for building scoring systems of greater validity. It was apparent that much of the decision-making in the clinical problem-solving tests could be rated on numerical scales and scored accordingly. For certain major parts of each test, however, it proved impossible to find objective criteria which could be used to relate these parts into a single integrated numerical scale. These numerically unrelatable parts were labelled Diagnostic Process, Diagnostic Product, and Therapeutic Product.

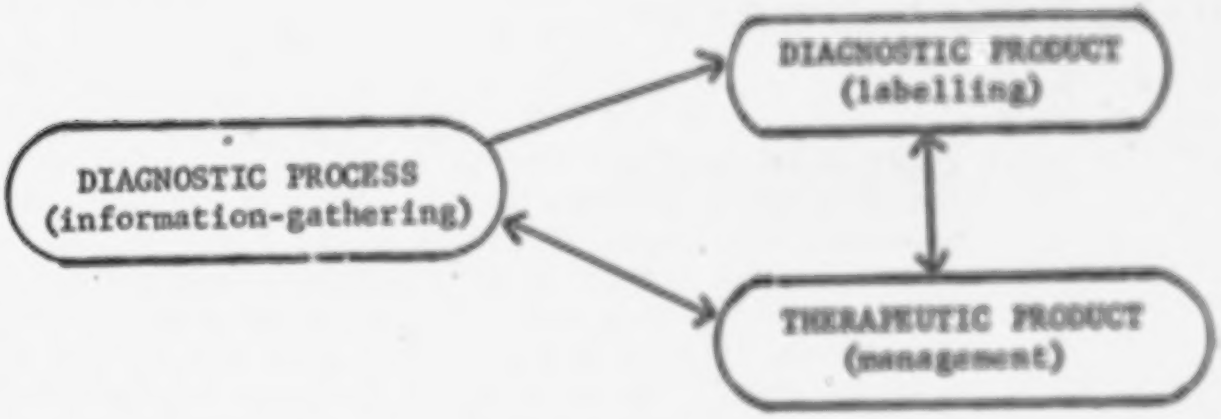
TABLE I

SUMMARY OF DATA-GATHERING ITEMS SELECTED TO SOLVE THE CASE PRESENTATIONS IN FOUR PROGRAMMED EXAMINATIONS

Medical College of Georgia, Junior Medical Students

		Experimental Group B' 3/12/65 N = 23	Control Group A' 4/30/65 N = 21
I.	**History Items**		
	L = Routine	64% of 1817	59% of 1659
	M = Indicated	84% of 368	89% of 273
II.	**Physical Examination Items**		
	L = Routine	68% of 2438	48% of 2058
	M = Indicated	86% of 1173	81% of 1239
III.	**Diagnostic Studies**		
	L = Routine	64% of 483	41% of 441
	M = Indicated	60% of 1104	51% of 1071
	N = Not Indicated	21% of 1403	16% of 1197
	P = Contraindicated	23% of 184	25% of 189
IV.	**Total Items**	61% of 8970	52% of 8127

The relationship between these three is shown in the following diagram:


DIAGNOSTIC PROCESS
(information-gathering)
DIAGNOSTIC PRODUCT
(labelling)
THERAPEUTIC PRODUCT
(management)

G. THEORETICAL REQUIREMENTS FOR A SCORING SYSTEM.

1. The Diagnostic Process.

a. Description.

i. *Traditional Workup.* In the traditional workup of a patient, the Diagnostic Process begins with the taking of the history, proceeds with physical examination of the patient and continues with a selection of diagnostic studies and procedures until either a diagnosis is reached or a decision is made that further tests and procedures are not in the patient's best interest. In attempting to solve the patient's problem, the student or physician begins as an omnivorous gatherer of information. His information-gathering must include problem sensitivity, because it is quite likely that as he learns more about the patient, he may discover that the patient's important problems are not the ones with which he was originally presented.

ii. *Search Behavior.* In his search behavior, he must recognize that the more information he gathers, the more selective he must become in choosing his methods of gathering further information. As he progresses from asking questions of the patient to requesting diagnostic studies which may be expensive, painful, or even dangerous, he must weigh the risks of ordering the test against the risks of not ordering the test. As the student-physician proceeds with the diagnostic process, the decisions he makes become more critical, more difficult, and call for increasingly complex comparisons of what he knows about the tests compared with what he now knows about the patient.

b. Weighting.

i. *Varies in Test.* It is apparent that the many items in the Diagnostic Process section of the test require varying weights to represent the process. Items which most physicians would select as a matter of course early in the Diagnostic Process, such as asking questions or taking a history, can be given positive weights, but *low* ones. As more information is obtained about the patient, certain items of information become clearly irrelevant, and yet obtaining this information may do the patient no harm. Such items can be given a *zero* weight. Other items become more *relevant* and more important as the patient's problem becomes clearer. These crucial, strongly indicated items can be given a heavier positive weight than the "routine" ones. Certain items, especially some tests and procedures, may be unnecessary, dangerous, and strongly *contraindicated*. They can be given appropriately negative weights. (These same procedures for another patient with a different problem might be just as dangerous, but might also be necessary to the solution of the problem and hence might be weighted positively.)

ii. Varies Between Problems. It is desirable to compare a subject's proficiency in the Diagnostic Process in one test with his proficiency in another. This cannot be done by a simple item count of "indicated" or "crucial" items. One test may have 50 such items, and another only five. This does not mean, however, that in one test the diagnostic process is ten times as complex as it is in the other. Quite possibly, the test with only five crucial diagnostic items may call for the student to process far more data to reach his decision than is called for in processing the 50 items of the other test. For this reason, similar-appearing items in different tests must often be assigned different weights.

iii. Clinical Agreement. Clinical experts reach agreement rather easily in assigning these items to such categories as "indicated," "not indicated," "contraindicated," etc. The chief difficulty in developing a scoring system for the Diagnostic Process section is deciding the weights for the various items. A proper selection of weights will not only reflect the diagnostic process realistically, but will also permit the scoring to discriminate between the performance of those who are experts in the Diagnostic Process and those who are less expert in varying degrees.

2. The Diagnostic Product.

a. Scoring Weights. Table II on page 18 is a chart representing the requirements for scoring the different sections of the test. The first section, Diagnostic Process, has already been discussed. The second section, Diagnostic Product (represented on the chart by the middle column between the vertical lines), is the simplest to score. The student is asked in this section to summarize and specify his concept of the patient's problems in a multiple-choice format. He may choose any number of combinations of 50 or more diagnostic terms.

b. Scoring Patterns. Theoretically, an astronomical number of combinations is possible; in practice, however, only the patterns which are actually chosen by those who take the test need to be scored. Our experience with a large group of students and physicians indicates that they choose only a small number of patterns. These include a complete and correct response, various correct but incomplete responses, and a limited number of plausible but erroneous responses. The total number of patterns is small enough that clinicians can evaluate them and rank them in their order of acceptability. This rank can then serve as a basis for a scoring system for Diagnostic Product.

3. The Therapeutic Product.

a. Relation of Other Parts of Test. The final section of the test deals with the student's formulation of his plans for treatment or disposition of the case. It should be pointed out that this section is related as directly to the Diagnostic Process as is the Diagnostic Product section.

	DIAGNOSTIC PROCESS (information-gathering)			DIAGNOSTIC PRODUCT (disease labelling)	THERAPEUTIC PRODUCT (management)
	History	Physical Exam	Studies Procedures		
Indicated Items (+ Scores)	YES	YES	YES	YES	YES
# Different Weights	2	2	2	MANY	MANY
Contra-indicated items (— Scores)	NONE	NONE	YES	NONE	YES
# Different Weights	NONE	NONE	2	NONE	MANY
Irrelevant Items (0 Score)	NONE	SOME	MANY	MANY	MANY
Sequence Patterns	NONE	NONE	SOME	MANY	MANY
Overlapping Patterns	SOME	SOME	SOME	SOME	MANY
Exclusion Patterns	NONE	NONE	SOME	SOME	MANY
Relative weights of sections	VARIABLE	VARIABLE	VARIABLE	Separate Score	Separate Score
	Separate Score				

TABLE II. Composite of Scoring System for Problem-Solving Tests

b. Independence From Other Scores. It has been observed that a student can complete the diagnostic process with skill, be unable to formulate a diagnosis using the terms offered him, or worse, formulate an erroneous diagnosis, and yet proceed with a plan of therapy which is appropriate for the patient but not for the diagnosis he has formulated. The opposite also occurs: The student formulates a plan of therapy which is appropriate for his erroneous diagnosis but inappropriate for the patient.

c. What Should Be Scored? The scoring system for Therapeutic Product is based on the appropriateness of therapy for the patient, and not its appropriateness to the student's plausible but erroneous diagnosis. The methods for assigning numerical scores are similar to those for Diagnostic Product.

II. METHOD

A. Development of Data.

1. Test Modification.

A year's use of the tests already developed indicated that a number of minor changes needed to be made in the tests to eliminate misunderstandings and to insure that the tests themselves provide a realistic experience in clinical problem solving. These changes involved alterations in the instructions, changes in the terminology of certain items, shifting certain items from one category to another and making certain additions and deletions. The answer sheet was extensively revised.

During the first year of the project Tests A, A', and A were fully revised. Copies of these tests in their unrevised and in their revised forms are included as Appendices B, E, F and G. A review of the remaining six tests was made. It was decided that further revision of these tests, most of which were similar in format to the tests already revised, should be postponed until more experience had been gained with the problems of developing a scoring system for the fully revised tests. Unfortunately the shortened time schedule of the project prevented further revisions of the remaining tests.

2. Acquisition of New Test Data.

The tests were to be administered in their varied forms to the following groups:

a. Beginning junior students, N = 90
b. Senior medical students, N = 90
c. Resident physicians in obstetrics and gynecology, N = 15
d. Resident physicians in specialties other than obstetrics and gynecology, N = 10
e. Specialists in gynecology, preferably diplomates of the American Board of Obstetrics and Gynecology, N = 10

The list of students to whom the tests had been administered by the end of the project is given in Table III on page 20.

TABLE III

LIST OF STUDENTS ADMINISTERED CLINICAL PROBLEM SOLVING TESTS

Medical College of Georgia	Pre-Test	Post-Test
10/3/65 3rd year - A'	22	
11/8/65 3rd year - A		22
11/29/65 3rd year - A	22	
1/17/66 3rd year - A		22
2/7/66 3rd year - A	24	
3/14/66 3rd year - A		24
4/11/66 3rd year - A	24	
5/16/66 3rd year - A		24
5/23/66 4th year - A		32
5/23/66 4th year - A'		30
5/23/66 4th year - A		30
5/24/66 3rd year - A'		92
11/1/66 3rd year - A' (12), A (12)		24
1/16/67 3rd year - A' (11), A (11)		22
3/17/67 3rd year - A' (12), A (12)		24
5/12/67 3rd year - A' (12), A (12)		24
5/22/67 3rd year - A		93
5/23/67 4th year - A		90

State University of Iowa	Pre-Test	Post-Test
3/31/66 3rd year - A		10
5/2/66 3rd year - A		10
6/2/66 3rd year - A		11
7/11/66 3rd year - A		13

University of Vermont	Pre-Test	Post-Test
5/16/66 3rd year - A		42

B. Development of Scoring.

1. Scoring Diagnostic Process.

Each item in the Diagnostic Process section (history, physical and diagnostic procedures) of each test was to be scored by five or more expert clinicians according to a schedule such as the following:

L = Routine or survey item (probability of positive finding not increased)
M = Indicated (probability of positive finding increased)
N = Not indicated (harmless, but neither routine nor indicated)
P = Contraindicated (unwarranted hazard or risk)

During the first year of the project this step was accomplished for tests A, A', and A̲. For these tests there were surprisingly few disagreements between the experts. Where disagreements persisted after the correction of typographical and other errors, they were retained as part of the record, but for the purpose of developing a trial scoring system, the remaining disagreements were temporarily resolved in favor of the majority opinion.

2. Scoring Diagnostic Product.

From the answer sheets all the scoring patterns in the Diagnostic Product section of each test were printed out. For each test, each expert clinician was given a summary of all pertinent positive and negative findings and was asked to divide the scoring patterns for Diagnostic Product into categories such as the following:

R = Correct primary diagnosis (most probable diagnosis which fits the data). Patterns which fall into this category were then to be ranked in order of the completeness of subsidiary or secondary diagnoses.

S = Unlikely diagnosis (it fits the data, but is improbable statistically). Patterns in this category were also to be ranked in the order of completeness of subsidiary or secondary diagnoses.

P = Partially correct diagnosis (it doesn't really fit the data but it is not hopelessly erroneous either).

U = Wrong diagnosis (wholly unacceptable).

During the first year of the project it was soon discovered that the expert clinicians, in spite of having worked through a 40-frame linear text giving them practice in using the above defined categories precisely in their specific clinical applications, found themselves unable to do so. For the most part they rebelled in frustration. It was found that they had a preference for four categories:

A - excellent	C - fair
B - good	D - bad

The "tubbing" boxes previously labeled R, S, P, and U were relabeled A, B, C, and D. This relieved the experts' frustration and permitted the collection of a large amount of data, none of which had been analyzed by the time the project was curtailed.

3. Scoring Therapeutic Product.

From the answer sheets all patterns used in recording Therapeutic Product on the answer sheets were printed out. The expert clinicians (previously briefed by the specially prepared programmed text and by summaries of the diagnosis and condition of each patient in each test) were asked to divide these patterns into categories such as the following:

A = Best management (the one recommended at this institution)

B = Alternate correct management (often recommended at other reputable institutions)

C = Acceptable management (may involve more risk or mutilation than necessary but is appropriate to the problem)

D = Inadequate management (undertreatment with non-fatal consequences)

E = Inappropriate management (involves grave unnecessary risks or major unnecessary mutilation)

F = Fatal mismanagement (whether by errors of omission or of commission)

X = Unable to classify

Once again the experts rebelled. The number of categories was reduced from six to four and the sorting boxes were relabeled using A, B, C, and D to mean excellent, good, fair, and bad. During the first year of the project a large amount of data was collected, none of which had been analyzed at the time the project ended.

C. Development of Weights.

1. Trial Weights.

After all items and/or all scoring patterns in the tests had been categorized by the expert clinicians, there were to be developed, with the consultation of these experts, a trial system of weighting the categories of items and scoring patterns. Unfortunately, due to the shortened time schedule, the trial weighting system was developed only for Diagnostic Process, not for Diagnostic Product or Therapeutic Product. The weighting system and the data obtained from scoring the tests using this system are included in this report as Appendices J, K and L. Unfortunately, because of the shortened time schedule, these data have not been analyzed.

2. Revision of Weights.

All the tests administered to the various population samples using the trial system of weights were to be scored using the computer processing. With the advice and consent of the subject-matter experts, various experimental adjustments were to be made in the weightings and the tests were to be rescored as necessary so that the scoring system made the greatest distinctions possible in the performance of the various population samples so that the expert performances received expert scores and the less expert performances received appropriately lesser scores. Unfortunately, this portion of the project could not be completed because of the shortened time schedule.

D. Statistical Methodology.

1. Objectives.

The statistical treatment in this project had the following purposes:

a. Identification of the portions of problem-solving tests which best discriminate different degrees of expertness in clinical problem-solving.

b. Substantiation of the validity and the reliability of the tests, in whole or in part, in measuring relative degrees of skill in clinical problem solving.

2. Assumptions.

a. It was assumed that groups of junior medical students, resident physicians in training, and fully trained expert clinicians represent, in ascending order, different degrees of skill in clinical problem solving.

b. If groups of junior medical students, resident physicians in training and fully trained expert clinicians are chosen in such a way that the scores of each group on a comprehensive multiple-choice test in obstetrics and gynecology, such as the examination of the National Board of Medical Examiners, Part II, reveal no difference between the groups, nevertheless, a difference between the groups in clinical problem-solving skills still exists.

c. If the statistical treatment of data from tests designed specifically to measure clinical problem-solving skills brings out differences in performance between groups of junior medical students, of resident physicians in training, and of fully trained expert clinicians which are not brought out by data from conventional multiple-choice testing, it is assumed that the differences represent, at least in part, differences in skills in clinical problem-solving.

3. Procedures.

a. Selection of Comparable Groups. A comprehensive examination in Obstetrics and Gynecology of the National Board of Medical Examiners, Part II, was to be administered to all medical students, resident physicians in training, and fully trained expert clinicians participating in the testing program. The range of scores for fully trained expert clinicians and for resident physicians in training was to be determined. From the medical student sample, a sub-group was to be selected whose mean score and SD was similar to or fell between that of the resident physicians and that of the fully trained expert clinicians. The clinical problem-solving test scores for this sub-group of medical students, the resident physicians, and the expert clinicians was to be subjected to further statistical treatment. Each participant in the testing program was to have taken as many as nine clinical problem-solving tests each of which was to have been scored for Diagnostic Process, Diagnostic Product, and Therapeutic Product. For each participant in the project, therefore, there was to be a maximum of 27 sub-scores in clinical problem solving for statistical treatment.

b. Treatments. The 27 sub-scores from the three study samples (sub-group of medical students, residents, expert clinicians) were to be subjected to the following statistical treatments:

i. "t" test.
ii. F test.
iii. "p" test.

4. Accomplishments in First Year.

Unfortunately the shortened time schedule prevented carrying out any of the statistical treatments prior to the termination of the project.

III. RESULTS AND CONCLUSIONS

The unanalyzed data available at the conclusion of the first year of the project on October 31, 1967, are given in Appendix L and the three supplements. Visual inspection of these data indicates that medical students during their clinical years rapidly improve their skills of inquiry but improvement in skills pf problem resolution (therapy) are less easily recognized. Unfortunately, analysis and statistical treatment, scheduled for the second year of the project, had to be halted.

If the raw data generated in this project at the time of its conclusion is inspected (or weighed), it may be concluded that there is a large amount of information awaiting detailed examination and statistical analysis. This seems to be the one inescapable conclusion of this project. Sufficient information is included with this report to permit replication and completion of the project should funds and personnel become available.

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APPENDIX A

DESCRIPTIVE CATALOG OF PROBLEM-SOLVING TESTS

I. EIGHT TESTS EMPHASIZING DIAGNOSTIC SKILLS

1. Test A.

Presenting Problem: Post-menopausal vaginal bleeding

Diagnostic Process:

relevant information concealed by tab-item format in

23 History Items: diabetes, high blood pressure, past history of syphilis, previous breast surgery for cancer.

40 Physical Examination Items: Surgical absence of breast, ulcerative lesion of vagina.

33 Diagnostic Tests and Procedures: biopsy of vaginal lesion, adenocarcinoma; x-ray, evidence of wide-spread metastatic disease.

Diagnosis: several appropriate choices in 30 options

Therapy: several appropriate choices in 44 options

2. Test A'

Presenting Problem: Same as A

Diagnostic Process:

relevant information concealed by tab-item format in:

23 History Items: diabetes, obesity

40 Physical Examination Items: obesity

33 Diagnostic Tests and Procedures: Vaginal cytology: suspicious Fractional D&C, endocervix: adenocarcinoma endometrium: estrogenic hyperplasia

Diagnosis: two options, including several appropriate choices

Therapy: 44 options, including several appropriate choices

3. Test A

Presenting Problem: Same as A

Diagnostic Process:

relevant information concealed by tab-item format in:

23 History Items: Same as A'

40 Physical Examination Items: Same as A'

33 Diagnostic Tests and Procedures: Vaginal cytology: negative Fractional D&C, endocervix: endocervical tissue endometrium: adenoacanthoma

Diagnosis: several appropriate choices in 30 options

Therapy: several appropriate choices in 44 options

4. Test C

Presenting Problem: Abdominal pain and distention

Diagnostic Process:

relevant information concealed by tab-item format in:

23 History Items: non-contributory information in 23 categories

40 Physical Examination Items: findings suggestive of pelvic mass and ascites

37 Diagnostic Tests and Procedures: peritoneal fluid, cytologic changes suggestive of malignancy

Diagnosis: several appropriate choices in 38 options

Therapy: one appropriate sequenced treatment pattern included in 30 options.

5. Test D

Presenting Problem: Sudden onset of pain in right lower quadrant

Diagnostic Process:

relevant information concealed by tab-item format in

23 History Items: symptoms suggestive of acute apendicitis

40 Physical Examination Items: findings suggestive of acute surgical abdomen with right lower quadrant pelvic mass

36 Diagnostic Tests and Procedure Items: Sample of peritoneal fluid, evidence of intraperitoneal bleeding

Diagnosis: 8 options offered must be ranked in order of probability.

Therapy: One appropriate and several inappropriate options favored.

6. Test D'

Presenting Problem: Sudden onset of pain in right lower quadrant

Diagnostic Process:

relevant information concealed by tab-item format in

23 History Options: minor alterations from D not affecting diagnostic problem

40 Physical Examination Options: minor alteration from D not affecting diagnostic problem

36 Diagnostic Tests and Procedure Options: several alterations from D suggesting infectious process; sample of peritoneal fluid, pus

Diagnosis: 8 options offered must be ranked in order of probability

Therapy: One appropriate and several inappropriate options offered.

7. Test E

Presenting Problem: Routine pre-employment physical

Diagnostic Process:

revelant information concealed by tab-item format in

23 History Options: previous occupation, prostitute

40 Physical Examination Options: small ulcer on vulva

33 Diagnostic Tests and Procedure Items: VDRL, reactive, titer 1:64; Darkfield Examination of lymph from ulcer; negative for spirochetes; Biopsy of ulcer: invasive squamous cell carcinoma

Diagnosis: 37 options offered, 3 correct ones must be chosen

Therapy: Any of several patterns in 33 options

8. Test E'

Presenting Problem: Same as E

Diagnostic Process:

relevant information concealed by tab-item format in

23 History Options: minor changes from E, not of diagnostic significance

40 Physical Examination Options: changes from E not of diagnostic significance

36 Diagnostic Tests and Procedure Options: VDRL, non-reactive Darkfield examination, negative; Smear of Lesion: positive for Donovan bodies; Biopsy of ulcer: granulomatous lesion

Diagnosis: of 37 options, one is correct

Therapy: 33 options offered, several are acceptable.

II. TEST EMPHASIZING THERAPEUTIC SKILL

The following test was primarily designed to measure skill in management of a previously defined (diagnosed) clinical problem:

Test B, First Part of Test.

Presenting Problem: 30-year-old primigravida at 26 weeks gestation requiring prenatal care.

Diagnostic Process:

relevant information concealed by abbreviated (8 option) diagnostic workup; suspicious vaginal cytology.

Management Options Offered:

Wait till patient's next visit for routine antepartal care and inform her that the reports were satisfactory.
Call the patient back to your office, inform her of the results and repeat the Pap smear.
Call the patient back to your office, inform her of the results and perform a Schiller test and obtain cervical punch biopsies from any non-staining areas
Admit the patient to the hospital for cervical conization and endocervical curettage.
Empty the uterus by hysterotomy and refer patient to a radiologist for therapy.
Call in a cancer specialist to handle the problem.
None of the above options

The student is then given appropriate information leading him to further management options.

The student is then asked to consider in sequence each of the following diagnoses:

a. Cervix showing decidual reaction compatible with pregnancy. Endocervical tissue showing squamous metaplasia with minimal atypia.

b. Atypical squamous cell metaplasia (dysplasia of cervix and endocervix)

c. Cervix with intraepithelial (pre-invasive) squamous cell carcinoma of the cervix with invasion of endocervical glands.

d. Invasive squamous cell carcinoma of the cervix extending to the margins of the specimen submitted, disease staged clinically as Ia.

For these diagnoses, he is asked to consider his management if the diagnosis were made on the basis of a specimen obtained either by

1. cervical punch biopsy, or by
2. conization and endocervical curettage.

and for each, to make the best choice from the following options:

Perform a cone biopsy of the cervix and curet the endocervix in the third trimester of the pregnancy.
Deliver vaginally at term, re-evaluate the cervix postpartum.
Deliver by Caesarean section at term, then start definitive treatment of cervical lesion.
Let pregnancy continue to term, then deliver by Caesarean hysterectomy.
Interrupt pregnancy by hysterotomy, then treat the cervical lesion by appropriate surgery.
Interrupt pregnancy by hysterotomy, then treat the cervical lesion with a full course of x-ray therapy and intracavitary radium.
Ignore the pregnancy, perform a radical hysterectomy with pelvic lymphadenectomy as soon as possible.
Ignore the pregnancy, treat the patient with a full course of intracavitary radium and external x-ray therapy.
Let pregnancy continue to fetal viability, deliver the fetus by Caesarean section, then treat the cervical lesion by appropriate therapy.
Let pregnancy continue to fetal viability, then induce labor, deliver infant vaginally and treat cervical lesion with radiation therapy.
Refer the patient to a specialist in oncology or radiology for further care.

Second Part of Test

Presenting Problem: Patient at 6 weeks postpartum requiring further management. Student is required to consider each of the following diagnoses in sequence.

1. Pre-invasive squamous cell carcinoma of the cervix, established by cone biopsy in mid-pregnancy.

2. Pre-invasive squamous cell carcinoma of the cervix, established by conization and fractional D&C at six weeks postpartum.

3. Invasive squamous cell carcinoma of the cervix extending to the margins of biopsy specimen submitted (cone or punch); disease staged clinically as Stage Ia.

For each of these, the student is asked to select appropriate therapy from the following options:

Perform a fractional D&C and conization of the cervix
Perform a total hysterectomy
Perform a radical hysterectomy with pelvic lymph node dissection
Irradiate the patient using internal radium sources and external x-ray to give a total dosage of 10,000r at Point A and 3,000r at Point B in 6 weeks
Irradiate the patient using external x-ray and internal radium sources to give a total dosage of 8,000r at Point A and 6,000r at Point B in 6 weeks
Refer the patient to a specialist for further care.

APPENDIX B

SAMPLE TEST A (1964 & 1965)

		PAGE
B - 1	1964 Edition. This is the first of this test.	37
B - 2	1965 Edition. This is the second of this test. There were two more 1965 editions (9/28/65 and 12/6/65) before the 1967 edition. These other 1965 editions had minor changes and are not included here.	61

APPENDIX B - 1

TEST A — 1964 EDITION

CLINICAL PROBLEM SOLVING TEST

DIRECTIONS

This "clinical problem solving test" consists of a case presentation in a format which is designed to test your ability and judgement in the diagnosis and treatment of the patient's disorder.

In the test booklet, the left-hand, even-numbered pages are "information" pages. Each "information" page consists of a list of conflicting statements about the patient, or directions to you, numbered in straight numerical order. Some items in the list are directly applicable to your management of this patient; others are wholly irrelevant. You must turn to the "question" pages to learn which are which.

The right-hand, odd-numbered pages in the test booklet are "question" pages. Each "question" page consists of a statement about the patient or directions to you, and is followed by a list of multiple choice items from which you are to make a selection (sometimes just one, sometimes many items). Each multiple choice item on each "question" page of the test booklet has a code letter following it. On the answer sheet, there is a corresponding column of letters. To the right of each letter on the answer sheet there is an erasable area concealing the number of the appropriate statement or direction on the corresponding "information" page.

To proceed with this test, make your selection (or selections) from the multiple choice items on the "question" page, erase the proper spots on the answer page, read the items with the corresponding code numbers on the information page and be guided by the information you are given.

In the gathering of information about your patient, you may choose AS MANY items as you think you need to manage the case. There is NO PENALTY for seeking apparently unnecessary or irrelevant information unless the patient's welfare is unnecessarily jeopardized in the process.

The case presentation begins on PAGE 3. Do not begin until you are told to do so

Prepared by: P. L. Wilds, M.D. & Virginia Zachert, Ph.D.
Department of Obstetrics & Gynecology
Medical College of Georgia
Augusta, Georgia

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October 1964.

PROBLEM: A - PAGE 2

INFORMATION
AND
DIRECTORY

1. Turn to PAGE 19
2. Turn to PAGE 13
3. Turn to PAGE 5
4. Turn to PAGE 7
5. Turn to PAGE 11
6. Turn to PAGE 21
7. Turn to PAGE 13
8. Turn to PAGE 23
9. Turn to PAGE 9
10. Turn to PAGE 17
11. Turn to PAGE 5
12. Turn to PAGE 19
13. Turn to PAGE 9
14. Turn to PAGE 7
15. Turn to PAGE 17
16. Turn to PAGE 13
17. Turn to PAGE 11
18. Turn to PAGE 5
19. Turn to PAGE 15
20. Turn to PAGE 11
21. Turn to PAGE 5
22. Turn to PAGE 7
23. Turn to PAGE 7
24. Turn to PAGE 5
25. Turn to PAGE 23
26. Turn to PAGE 19
27. Turn to PAGE 21
28. Turn to PAGE 21
29. Turn to PAGE 19
30. Turn to PAGE 5
31. Turn to PAGE 7
32. Turn to PAGE 17
33. Turn to PAGE 19
34. Turn to PAGE 15
35. Turn to PAGE 9
36. Turn to PAGE 15
37. Turn to PAGE 23
38. Turn to PAGE 21
39. Turn to PAGE 5
40. Turn to PAGE 7
41. Turn to PAGE 13
42. Turn to PAGE 13
43. Turn to PAGE 17
44. Turn to PAGE 9
45. Turn to PAGE 15
46. Turn to PAGE 5
47. Turn to PAGE 11
48. Turn to PAGE 19
49. Turn to PAGE 7
50. Turn to PAGE 21
51. Turn to PAGE 5
52. Turn to PAGE 13

CASE PRESENTATION

A fifty year old woman comes to your office with a complaint of intermittent vaginal bleeding of six weeks' duration. She adds that this is the first vaginal bleeding she has noted since her menopause two years ago at age 48.

The further management of this patient including all steps necessary for diagnosis and treatment is your responsibility.

From the list below, select the ONE step which seems to you to be most appropriate.

On the answer sheet, make your selection from COLUMN 10

Obtain more history______________________________ R
Perform a general physical examination (including pelvic)______________ S
Obtain or perform diagnostic studies and procedures (including Pap smear)______ T
Do a pelvic examination (only)______________________________ U
Obtain a Papanicolaou Smear (only)______________________________ V
Perform a fractional dilatation and curettage______________________ W
Perform a fractional D&C and biopsy (cone) the cervix________________ X

PROBLEM A - PAGE 4

INFORMATION AND DIRECTORY

1. Chronic alcoholic
2. Living and well
3. None
4. Has apartment in own house
5. Uses Ex-lax occasionally
6. Always "nervous"
7. Turn to PAGE 13
8. Frequent backaches
9. Periods 12x30x5 were prolonged and irregular for 3 years before menopause, at 48.
10. Appendectomy at 23, left mastectomy at age 40-5,
11. Turn to PAGE 5
12. Teetotaler, on 1800 cal. diet
13. Wears glasses for reading
14. Asymptomatic
15. Had cancer of (?) at age 46. She and husband are separated.
16. Takes 1 gm. Tolbutamide daily.
17. None
18. High school
19. Turn to PAGE 15
20. None
21. Hasn't felt well for years.
22. None
23. Turn to PAGE 7
24. Occasional frequency, no dysuria
25. None
26. Turn to PAGE 19
27. Diabetes 10 years duration; syphilis 15 years ago, adequately treated. Breast cancer 8 years ago, treated by surgery.
28. No information available
29. All in Europe
30. Has diabetes & high blood pressure.
31. Runs boarding house
32. No recent change
33. Spouse died 4 years ago of Tbc.
34. None
35. Turn to PAGE 9
36. Regular & satisfactory (friend rents room from her) but has had post-coita bleeding for 6 weeks.
37. Severe
38. Turn to PAGE 21.
39. None
40. Sometimes has palpitations
41. Turn to PAGE 11
42. Died of cancer of the womb.
43. Turn to PAGE 17.
44. Still bleeding
45. Suffers from hemorrhoids
46. None noted
47. Turn to PAGE 11
48. You can't get here from there
49. Living and well
50. Turn to PAGE 19
51. Regular all her life, LMP 3 years ago, no bleeding since then
52. Frequent, severe

MORE HISTORY

You may assume that the Chief Complaint and Present Illness as given are complete and correct. For additional information please select AS MANY of the items below as interest you, erase the code numbers of these items in the proper column of the answer sheet, then find he information with the corresponding code numbers on PAGE 6.

On the answer sheet, make your selection from COLUMN 10

Past Medical History	Illnesses	a
	Injuries	b
	Operations	c
	Pregnancies	d
Family History	Father	e
	Mother	f
	Siblings	g
	Others	h
Social History	Schooling	i
	Occupation	j
	Home Environment	k
	Marital Situation	l
	Sex life	m
	Habits	n
	Drugs & medicines	o
System Review	General (wgt., fever., weakness, etc)	p
	HEENT	q
	CVR	r
	GI	s
	GU	t
	GYN	u
	NP	v
	Musculoskeletal	w

When you have completed your history-taking, select from the list below the ONE step which seems to you to be most appropriate.

On the answer sheet, make your selection from COLUMN 10

Your diagnostic opinion	P
Your plan of treatment	Q
Obtain more history	R
Perform a general physical examination	S
Obtain or perform diagnostic studies and procedures	T
Pelvic examination(only)	U
Pap smear (only)	V
Fractional D&C	W
Fractional D&C + Conization of the Cervix	X

PROBLEM A - PAGE 6

INFORMATION AND DIRECTORY

1. Turn to PAGE 11
2. None palpable
3. 5'6", 170 lbs.
4. Well formed, left mastectomy scar.
5. Not enlarged
6. Not enlarged
7. Turn to PAGE 13
8. Intact
9. Atrophic
10. Grade II changes, capillary microaneurisms.
11. Turn to PAGE 3
12. No abnormalities noted
13. Supple
14. Turn to PAGE 19
15. 37°, 80, 18, 180/112
16. Obese
17. Not felt
18. Moist.
19. Turn to PAGE 15
20. Normal
21. Not palpable
22. Unremarkable
23. Turn to PAGE 7
24. Undistended
25. Physiologic
26. Turn to PAGE 19
27. Well-formed
28. Well-formed
29. Well developed, mod, obese W.F.
30. Unobstructed
31. Not enlarged
32. Nothing abnormal
33. Old mastectomy scar on left: right negative. No nodes
34. 1 cm. ulcer on left lateral wall (middle 1/3)
35. Turn to PAGE 9
36. Normal size no murmurs
37. Within normal limits
38. Turn to PAGE 21
39. Left drum perforated
40. Mid line
41. Not noted
42. Intact
43. Turn to PAGE 17
44. No abnormalities noted.
45. No abnormalities felt.
46. Atrophic
47. Turn to PAGE 11
48. Abnormality found, see other items.
49. Not enlarged, mid-position.
50. Not noted
51. Turn to PAGE 9
52. All present and equal.

GENERAL PHYSICAL EXAMINATION

Please select as many of the items below as you wish to examine. In the proper column of the answer sheet, erase the code numbers of these items, and look up the findings with the corresponding code numbers on Page 8.

On the answer sheet, make your selections from COLUMN 9

TPR, BP ______ a
Hgt. wgt. ______ b
General description ______ c
Skin ______ d
Lymphatics ______ e
Head & face ______ f
Hair ______ g
Eyes ______ h
Ears ______ i
Nose ______ j
Mouth, teeth, throat ______ k
Neck ______ l
Trachea ______ m
Thyroid ______ n
Vessels ______ o
Chest ______ p
Breast & axillae ______ q
Heart ______ r
Lungs ______ s
Abdomen ______ t
LSK ______ u
Masses ______ v
Tenderness ______ w
Pelvic examination ______ x
Hair distribution ______ y
Ext. genitalia ______ z
SUB glands ______ A
Introitus and perineum ______ B
Vagina ______ C
Cervix ______ D
Uterus ______ E
Adnexa ______ F
Rectal ______ G
Sphincter ______ H
Masses ______ I
Back ______ J
Extremities ______ K
Pulses ______ L
DTRS ______ M
Neurological ______ N

On the answer sheet make your selection from COLUMN 10

Your diagnostic opinion ______ P
Your plan of treatment ______ Q
Obtain more history ______ R
Perform a general physical examination ______ S
Obtain or perform diagnostic studies and procedures ______ T
Pelvic examination (only) ______ U
Pap smear (only) ______ V
Fractional D&C ______ W
Fractional D&C + Conization of the Cervix ______ X

INFORMATION AND DIRECTIONS

1. Turn to PAGE 21
2. 60% excretion in 15 minutes
3. Non-reactive
4. Negative
5. Negative
6. Adenocarcinoma, medullary type
7. Turn to PAGE 13
8. No abnormalities
9. Chronic cervicitis
10. Na 140, K 3.8, Cl 98, CO_2 25
11. Turn to PAGE 3
12. Report not available
13. Negative
14. Class IV (positive) malignant cells present.
15. Class II, estrogen effect
16. No abnormalities
17. Negative
18. Hct. 38, WBC 8,000, differential normal
19. Turn to PAGE 13
20. Less than 6% retention
21. Normal tracing
22. 100 mg%
23. Turn to PAGE 7
24. Specific gravity 1.010, pH 5.8 glucose 2+, acetone negative, albumin positive microscopic: occasional WBC
25. Specimen hemolyzed
26. Turn to PAGE 19
27. Report not available
28. Negative
29. Report not available
30. Negative
31. 4 Bodansky units/100 ml.
32. Negative
33. Negative
34. F 100, 1 hr. 220, 2 hr. 190, 3 hr. 140
35. Turn to PAGE 9
36. Scattered spherical ("snowball") densities in both lung fields, minimal cardiac enlargement
37. Adeno-acanthoma of endometrium
38. Turn to PAGE 21
39. 10 mgm %
40. Negative
41. Not done
42. Not available
43. Turn to PAGE 17
44. Negative
45. Negative film. Heart normal size.
46. Left ventricular hypertrophy——
47. Turn to PAGE 11
48. Negative
49. Specimen lost
50. Positive
51. Left breast shadow absent; otherwise, negative chest film.
52. Atypical basal cell hyperplasia

DIAGNOSTIC STUDIES AND PROCEDURES

Please select AS MANY of the items below as you think might be helpful, then in the proper column of the answer sheet, erase the code numbers of these items and look up the results with corresponding code numbers on PAGE 8.

On the answer sheet, make your selection from COLUMN

Chemistries (Blood, serum)	Alk. Phosphatase	a
	Bilirubin, direct, indirect	b
	Glucose, 2 hr., postprandial	c
	Electrolytes, Na, K, Cl.	d
	Urea Nitrogen (BUN)	e
Clinical & cyto-pathology serology Hematology	Stool for blood, OCP	f
	Vaginal Pap smear	g
	VDRL	h
	Blood Group & Rh	i
	CBC	j
Urine tests	Urinalysis, complete	k
X-rays	Abdomen	l
	Barium enema	m
	Chest	n
	Cholecystogram	o
	GI series	p
	Pelvis	q
	Pyelogram (IVP)	r
	Skull	s
	Spine	t
Procedures & Surg. Pathology	BSP	u
	Biopsy Cervix	v
	Biopsy vaginal ulcer	w
	Cystoscopy	x
	Glucose tolerance test	y
	Electrocardiogram	z
	Frei test	A
	Examination under anesthesia	B
	PPD	C
	Proctosigmoidoscopy	D
	PSP	E
	Smears for Donovan bodies	F
	Smears for H. Ducreyi	G

After you have completed your studies and procedures, select from the list below the ONE step which seems to you to be most appropriate.

On the answer sheet, make your selection from COLUMN O

Your diagnostic opinion ____ P
Your plan of treatment ____ Q
Obtain more history ____ R
Perform a general physical examination ____ S
Obtain or perform diagnostic studies and procedures ____ T
Pelvic examination (only) ____ U
Pap smear (only) ____ V
Fractional D&C ____ W
Fractional D&C + Conization of the Cervix ____ X

PROBLEM A - PAGE 10, 12

INFORMATION AND DIRECTORY

1. Turn to PAGE 11
2. Turn to PAGE 3
3. Turn to PAGE 5
4. Turn to PAGE 9
5. Normal
6. Turn to PAGE 13
7. Turn to PAGE 21
8. Turn to PAGE 11
9. Turn to PAGE 9
10. Turn to PAGE 13
11. Turn to PAGE 9
12. Turn to PAGE 21
13. Turn to PAGE 7
14. Turn to PAGE 13
15. Turn to PAGE 13
16. Turn to PAGE 17
17. Turn to PAGE 13
18. Turn to PAGE 7
19. Turn to PAGE 3
20. Turn to PAGE 11
21. Atrophic
22. Turn to PAGE 3
23. Replaced by crater-like ulcer
24. Turn to PAGE 23
25. Atrophic
26. Turn to PAGE 15
27. Turn to PAGE 19
28. Turn to PAGE 19
29. Turn to PAGE 5
30. Turn to PAGE 19
31. Turn to PAGE 17
32. Class IV (positive) malignant cells present
33. Turn to PAGE 19
34. Turn to PAGE 15
35. Turn to PAGE 19
36. Turn to PAGE 15
37. Not enlarged
38. Turn to PAGE 17
39. Turn to PAGE 5
40. Soft, 2 x normal size
41. Turn to PAGE 17
42. Not palpable
43. Turn to PAGE 7
44. Turn to PAGE 9
45. Small
46. Turn to PAGE 21
47. Turn to PAGE 19
48. Turn to PAGE 19
49. 1 cm. ulcer in middle 1/3 of left lateral wall
50. Turn to PAGE 21
51. Turn to PAGE 9
52. Class II (negative), estrogen effect.

DO A PELVIC EXAMINATION

Please select AS MANY of the items below as you wish to examine. In the proper column of the answer sheet, erase the code numbers of these items and look up the findings with the corresponding code numbers on PAGE 10.

On the answer sheet, make your erasures in COLUMN 8

External genitalia________ I
SUB Glands________ J
Vagina________ K
Cervix________ L
Uterus________ M
Adnexa________ N

After you have completed your examination, from the list below, choose the ONE step which seems to you to be most appropriate.

On the answer sheet, make your selection from COLUMN

Your diagnostic opinion________ P
Your plan of treatment________ Q
Obtain more history________ R
Perform a general physical examination________ S
Obtain or perform diagnostic studies and procedures________ T
Pelvic examination(only)________ U
Pap smear (only)________ V
Fractional D&C________ W
Fractional D&C and Conization of the cervix________ X

PROBLEM A - PAGE 10, 12

INFORMATION AND DIRECTORY

1. Turn to PAGE 11
2. Turn to PAGE 3
3. Turn to PAGE 3
4. Turn to PAGE 9
5. Normal
6. Turn to PAGE 13
7. Turn to PAGE 21
8. Turn to PAGE 11
9. Turn to PAGE 9
10. Turn to PAGE 13
11. Turn to PAGE 9
12. Turn to PAGE 21
13. Turn to PAGE 7
14. Turn to PAGE 13
15. Turn to PAGE 13
16. Turn to PAGE 17
17. Turn to PAGE 13
18. Turn to PAGE 7
19. Turn to PAGE 5
20. Turn to PAGE 11
21. Atrophic
22. Turn to PAGE 5
23. Replaced by crater-like ulcer
24. Turn to PAGE 23
25. Atrophic
26. Turn to PAGE 15
27. Turn to PAGE 19
28. Turn to PAGE 19
29. Turn to PAGE 5
30. Turn to PAGE 19
31. Turn to PAGE 17
32. Class IV (positive) malignant cells present
33. Turn to PAGE 19
34. Turn to PAGE 15
35. Turn to PAGE 19
36. Turn to PAGE 15
37. Not enlarged
38. Turn to PAGE 17
39. Turn to PAGE 5
40. Soft, 2 x normal size
41. Turn to PAGE 17
42. Not palpable
43. Turn to PAGE 7
44. Turn to PAGE 9
45. Small
46. Turn to PAGE 21
47. Turn to PAGE 19
48. Turn to PAGE 19
49. 1 cm. ulcer in middle 1/3 of left lateral wall
50. Turn to PAGE 21
51. Turn to PAGE 9
52. Class II (negative), estrogen effect.

OBTAIN A PAPANICOLAOU SMEAR

To obtain your report, make an erasure in COLUMN 8

Cytologist's Report______H

Your next step in management would be which of the following?
From the list below, choose the ONE step which seems to you to be most appropriate

On the answer sheet, make your selection in COLUMN 9

Your diagnostic opinion______________________________P
Your plan of treatment_______________________________Q
Obtain more history__________________________________R
Perform a general physical examination_______________S
Obtain or perform diagnostic studies and procedures____T
Pelvic examination (only)____________________________U
Pap smear (only)_____________________________________V
Fractional D&C_______________________________________W
Fractional D&C + Conization of the Cervix____________X

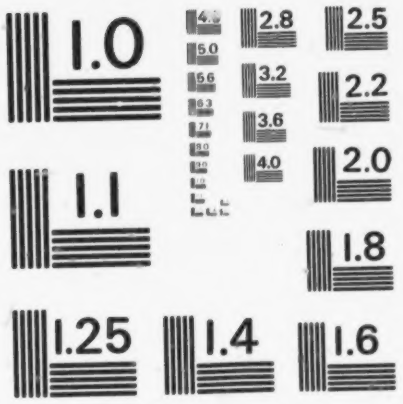
PROBLEM A - PAGE 14 16 18 20

INFORMATION
AND
DIRECTORY

1. Turn to PAGE 22
2. Squamous cell carcinoma of cervix
3. Turn to PAGE 22
4. Turn to PAGE 22
5. Turn to PAGE 3
6. Turn to PAGE 3
7. Turn to PAGE 3
8. Turn to PAGE 22
9. Turn to PAGE 22
10. Turn to PAGE 3
11. Turn to PAGE 22
12. Turn to PAGE 3
13. Turn to PAGE 3
14. Turn to PAGE 22
15. Turn to PAGE 3
16. Turn to PAGE 3
17. Turn to PAGE 3
18. Turn to PAGE 22
19. Turn to PAGE 22
20. Turn to PAGE 3
21. Turn to PAGE 3
22. Turn to PAGE 22
23. Turn to PAGE 22
24. Turn to PAGE 3
25. Adenocarcinoma of endometrium
26. Turn to PAGE 22
27. Turn to PAGE 22
28. Endocervical tissue
29. Turn to PAGE 3
30. Turn to PAGE 3
31. Turn to PAGE 3
32. Turn to PAGE 22
33. Turn to PAGE 3
34. Turn to PAGE 22
35. Turn to PAGE 22
36. Turn to PAGE 22
37. Adenocarcinoma of endocervix
38. Turn to PAGE 22
39. Turn to PAGE 3
40. Turn to PAGE 3
41. Turn to PAGE 22
42. No tissue obtained
43. Turn to PAGE 3
44. Chronic cervicitis with squamous metaplasia
45. Adeno-acanthoma
46. Turn to PAGE 22
47. Turn to PAGE 3
48. Turn to PAGE 22
49. Atrophic endometrium
50. Turn to PAGE 3
51. Turn to PAGE 22
52. Estrogenic hyperplasia of the endometrium

2 OF 4

ED 017025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MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

PERFORM A FRACTIONAL D&C

To obtain your pathology reports, erase the code numbers of the following items in the proper column of the answer sheet, and look up the results with the same code numbers on PAGE 14.

On the answer sheet, make your selection from COLUMN 10.

Endocervical scrapings __________ F
Endometrial scrapings __________ G

From the list below, choose the ONE step which seems to be most appropriate.

On the answer sheet, make your selection from COLUMN

Observe for further bleeding __________ P
Perform a total hysterectomy __________ Q
Intrauterine radium therapy with total hysterectomy & BSO a month later __________ R
Perform a radical hysterectomy with bilateral salpingo-oophorectomy (BSO) and removal of upper part of vagina __________ T
Perform a total vaginectomy __________ U
Castrate the patient and radiate the involved areas __________ V
Institute progestational therapy __________ W
Evaluate the patient's problem further __________ X

INFORMATION
AND
DIRECTORY

1. Turn to PAGE 22
2. Squamous cell carcinoma of cervix
3. Turn to PAGE 22
4. Turn to PAGE 22
5. Turn to PAGE 3
6. Turn to PAGE 3
7. Turn to PAGE 3
8. Turn to PAGE 22
9. Turn to PAGE 22
10. Turn to PAGE 3
11. Turn to PAGE 22
12. Turn to PAGE 3
13. Turn to PAGE 3
14. Turn to PAGE 22
15. Turn to PAGE 3
16. Turn to PAGE 3
17. Turn to PAGE 3
18. Turn to PAGE 22
19. Turn to PAGE 22
20. Turn to PAGE 3
21. Turn to PAGE 3
22. Turn to PAGE 22
23. Turn to PAGE 22
24. Turn to PAGE 3
25. Adenocarcinoma of endometrium
26. Turn to PAGE 22
27. Turn to PAGE 22
28. Endocervical tissue
29. Turn to PAGE 3
30. Turn to PAGE 3
31. Turn to PAGE 3
32. Turn to PAGE 22
33. Turn to PAGE 3
34. Turn to PAGE 22
35. Turn to PAGE 22
36. Turn to PAGE 22
37. Adenocarcinoma of endocervix
38. Turn to PAGE 22
39. Turn to PAGE 3
40. Turn to PAGE 3
41. Turn to PAGE 22
42. No tissue obtained
43. Turn to PAGE 3
44. Chronic cervicitis with squamous metaplasia
45. Adeno-acanthoma
46. Turn to PAGE 22
47. Turn to PAGE 3
48. Turn to PAGE 22
49. Atrophic endometrium
50. Turn to PAGE 3
51. Turn to PAGE 22
52. Estrogenic hyperplasia of the endometrium

FRACTIONAL D&C AND CONE BIOPSY OF THE CERVIX

To obtain your pathology reports, erase the code numbers of the following items in the proper column of the answer sheet then look up your results on PAGE 16.

On the answer sheet, make your erasures in COLUMN 10.

Cone the cervix__________E
Endocervical scrapings__________F
Endometrial scrapings__________G

From the list below, choose the ONE step which seems to you to be most appropriate.

On the answer sheet, make your selection in COLUMN 8.

Observe for further bleeding__________P
Perform a total hysterectomy__________Q
Intrauterine radium therapy with total hysterectomy and BSO a month later__________R
Perform a radical hysterectomy with bilateral salpingo-oophorectomy (BSO) and removal of upper part of vagina__________T
Perform a total vaginectomy__________U
Castrate the patient and radiate the involved areas__________V
Institute progestational therapy__________W
Evaluate the patient's problem further__________X

PROBLEM A - PAGE 14 16 18 20

INFORMATION
AND
DIRECTORY

1. Turn to PAGE 22
2. Squamous cell carcinoma of cervix
3. Turn to PAGE 22
4. Turn to PAGE 22
5. Turn to PAGE 3
6. Turn to PAGE 3
7. Turn to PAGE 3
8. Turn to PAGE 22
9. Turn to PAGE 22
10. Turn to PAGE 3
11. Turn to PAGE 22
12. Turn to PAGE 3
13. Turn to PAGE 3
14. Turn to PAGE 22
15. Turn to PAGE 3
16. Turn to PAGE 3
17. Turn to PAGE 3
18. Turn to PAGE 22
19. Turn to PAGE 22
20. Turn to PAGE 3
21. Turn to PAGE 3
22. Turn to PAGE 22
23. Turn to PAGE 22
24. Turn to PAGE 3
25. Adenocarcinoma of endometrium
26. Turn to PAGE 22
27. Turn to PAGE 22
28. Endocervical tissue
29. Turn to PAGE 3
30. Turn to PAGE 3
31. Turn to PAGE 3
32. Turn to PAGE 22
33. Turn to PAGE 3
34. Turn to PAGE 22
35. Turn to PAGE 22
36. Turn to PAGE 22
37. Adenocarcinoma of endocervix
38. Turn to PAGE 22
39. Turn to PAGE 3
40. Turn to PAGE 3
41. Turn to PAGE 22
42. No tissue obtained
43. Turn to PAGE 3
44. Chronic cervicitis with squamous metaplasia
45. Adeno-acanthoma
46. Turn to PAGE 22
47. Turn to PAGE 3
48. Turn to PAGE 22
49. Atrophic endometrium
50. Turn to PAGE 3
51. Turn to PAGE 22
52. Estrogenic hyperplasia of the endometrium

YOUR DIAGNOSIS

1. Please write down your diagnosis in the space provided on the back of the answer sheet.

2. When you have done so, please select from the list below the ONE step which seems to you to be most appropriate.

On the answer sheet, make your selection from COLUM 8

Observe for further bleeding	P
Perform a total hysterectomy	Q
Intrauterine radium therapy with total hysterectomy and BSO a month later	R
Perform a radical hysterectomy with bilateral salpingo-oophorectomy (BSO) and removal of upper part of vagina	T
Perform a total vaginectomy	U
Castrate the patient and radiate the involved areas	V
Institute progestational therapy	W
Evaluate the patient's problem further	X

PROBLEM A - PAGE 14 16 18 20

INFORMATION
AND
DIRECTORY

1. Turn to PAGE 22
2. Squamous cell carcinoma of cervix
3. Turn to PAGE 22
4. Turn to PAGE 22
5. Turn to PAGE 3
6. Turn to PAGE 3
7. Turn to PAGE 3
8. Turn to PAGE 22
9. Turn to PAGE 22
10. Turn to PAGE 3
11. Turn to PAGE 22
12. Turn to PAGE 3
13. Turn to PAGE 3
14. Turn to PAGE 22
15. Turn to PAGE 3
16. Turn to PAGE 3
17. Turn to PAGE 3
18. Turn to PAGE 22
19. Turn to PAGE 22
20. Turn to PAGE 3
21. Turn to PAGE 3
22. Turn to PAGE 22
23. Turn to PAGE 22
24. Turn to PAGE 3
25. Adenocarcinoma of endometrium
26. Turn to PAGE 22
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28. Endocervical tissue
29. Turn to PAGE 3
30. Turn to PAGE 3
31. Turn to PAGE 3
32. Turn to PAGE 22
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39. Turn to PAGE 3
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46. Turn to PAGE 22
47. Turn to PAGE 3
48. Turn to PAGE 22
49. Atrophic endometrium
50. Turn to PAGE 3
51. Turn to PAGE 22
52. Estrogenic hyperplasia of the endometrium

YOUR PLAN OF TREATMENT

From the list below, please select the ONE step which seems to you to be most appropriate. Please write down your diagnosis (or diagnoses) in the space provided on the back of the answer sheet.

On the answer sheet, make your selection from COLUMN 8

Observe for further bleeding	P
Perform a total hysterectomy	Q
Intrauterine radium therapy with total hysterectomy and BSO a month later	R
Perform a radical hysterectomy with bilateral salpingo-oophorectomy (BSO) and removal of upper part of vagina	T
Perform a total vaginectomy	U
Castrate the patient and radiate the involved areas	V
Institute progestational therapy	W
Evaluate the patient's problem further	X

Except when emergency situations dictate otherwise, it is usually a good practice to establish a diagnosis before instituting treatment. Ordinarily one first obtains an adequate detailed history, proceeds with a physical examination and then selects further diagnostic studies and procedures as the findings indicate.

1. If you have not yet written down your diagnosis (or diagnoses) in the space provided on the back of the answer sheet, please do so NOW.

2. If you have not yet committed yourself to a plan of treatment for this patient, please either select a treatment by turning to PAGE 21, or else write your own plan of treatment in the space provided on the back of the answer page.

When you have accomplished items 1 and 2 above, you have completed this problem. Go on to the next case.

APPENDIX B - 2

PAGE 1

TEST A -- 1965 EDITION

CLINICAL PROBLEM SOLVING TEST

This "clinical problem solving test" consist of a case presentation in a format which is designed to test your ability and judgement in the diagnosis and treatment of the patient's disorder.

Information Pages. In the test booklet, the left-hand, even-numbered pages are "information" pages. Each "information" page consists of a list of conflicting statements about the patient, or directions to you, numbered in straight numerical order. Some items in the list are directly applicable to your management of this patient; others are wholly irrelevant. You must turn to the "question" pages to learn which are which.

Question Pages. The right-hand, odd-numbered pages in the test booklet are "question" pages. Each "question" page consists of a statement about the patient or directions to you, and is followed by a list of multiple choice items from which you are to make a selection (sometimes just one, sometimes many items). Each multiple choice item on each "question" page of the test booklet has a code letter following it. On the answer sheet, there is a corresponding column of letters. To the right of each letter on the answer sheet there is an eraseable area concealing the number of the appropriate statement or direction on the corresponding "information" page.

Answer Page. To proceed with this test, make your selection (or selections) from the multiple choice items on the "question" page, erase the proper spots on the answer page, read the items with the corresponding code numbers on the information page and be guided by the information you are given. You may turn to any page in any order.

Scoring. In the gathering of information about your patient, you may choose AS MANY items as you think you need to manage the case. There is NO PENALTY for seeking apparently unnecessary or irrelevant information unless the patient's welfare is unnecessarily jeopardized in the process. This is not a test of your ability to guess the correct diagnosis with the least possible information. You are advised against skipping any item in the workup.

Procedure. The case presentation begins on PAGE 3. You may begin immediately to read any or all pages of the test booklet in any order you wish, but do not make erasures on the answer sheet until you are told to do so.

Prepared by: P. L. Wilds, M.D. and Virginia Zachert, Ph.D.
Department of Obstetrics and Gynecology
Medical College of Georgia
Augusta, Georgia

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March 1965 (mb)

0101c

CASE PRESENTATION

A fifty year old woman comes to your office with a complaint of intermittent vaginal bleeding of six weeks' duration. She adds that this is the first vaginal bleeding she has noted since her menopause two years ago at age 48.

The further management of this patient including all steps necessary for diagnosis and treatment is your responsibility.

From the list below, select the step which seems to you to be most appropriate, then turn to the PAGE indicated.

DIRECTORY

More history. PAGE 5
General physical examination. PAGE 7
Diagnostic studies and procedures. PAGE 9
Your diagnosis. PAGE 11
Your plan of treatment. PAGE 13

INFORMATION AND DIRECTORY

01. Chronic alcoholic
02. Living and well
03. None
04. Has apartment in own house
05. Uses Ex-lax occasionally
06. Always "nervous."
07. College graduate
08. Frequent backaches
09. Periods 12x30x5 were prolonged and irregular for 3 years before menopause at 48.
10. Appendectomy at 23, left mastectomy at age 47.
11. No operations.
12. Teetotaler, on 1800 cal. diet.
13. Wears glasses for reading.
14. Asymptomatic
15. Had cancer of (?) at age 46. She and husband are separated
16. Takes 1 gm. Tolbutamide daily.
17. None
18. High school
19. Usual childhood diseases.
20. None
21. Hasn't felt well for years.
22. None
23. Has been taking "female hormone" pills for years for "the change".
24. Occasional frequency, no dysuria
25. None
26. Lives with husband, 57.
27. Diabetes 10 years duration; syphilis 15 years ago, adequately treated; Breast cancer 3 years ago, treated by surgery.
28. No information available
29. All in Europe
30. Has diabetes & high blood pressure.
31. Runs boarding house
32. No recent change
33. Spouse died 4 years ago of Tbc.
34. None
35. Gross hematuria (one day episode) 2 months ago.
36. Regular & satisfactory (friend rents room from her) but has had post-coital bleeding for 6 weeks.
37. Severe
38. Severe shortness of breath and minimal excretion
39. None
40. Sometimes has palpitations
41. Frequent occipital headaches
42. Died of cancer of the womb.
43. Eats "what she pleases," mostly carbohydrates
44. Still bleeding.
45. Suffers from hemorrhoids
46. None noted
47. Patient refuses to answer
48. You can't get here from there.
49. Living and well
50. Sometimes incontinent.
51. Regular all her life, LMP 3 years ago, no bleeding since then.
52. Frequent, severe.

MORE HISTORY

You may assume that the Chief Complaint and Present Illness as given are complete and correct. For additional information please select AS MANY of the items below as interest you, erase the code numbers of these items in the proper column of the answer sheet, then find the information with the corresponding code numbers on PAGE 4. On the answer sheet, make your erasures in COLUMN 10.

Past Medical History	Illnesses	a
	Injuries	b
	Operations	c
	Pregnancies	d
Family History	Father	e
	Mother	f
	Siblings	g
	Others	h
Social History	Schooling	i
	Occupation	j
	Home Environment	k
	Marital situation	l
	Sex life	m
	Habits	n
	Drugs & medicines	o
System Review	General (wgt., fever, weakness, etc.)	p
	HEENT	q
	CVR	r
	GI	s
	GU	t
	GYN	u
	NP	v
	Musculoskeletal	w

When you have completed your history-taking, select from the list below the step which seems to you to be most appropriate, then turn to the PAGE indicated.

DIRECTORY

General physical examination. PAGE 7
Diagnostic studies and procedures. PAGE 9
Your diagnosis. PAGE 11
Your plan of treatment. PAGE 13

01. Twice normal size.
02. None palpable
03. 5'6", 170 lbs.
04. Well-formed, left mastectomy scar.
05. Not enlarged
06. Not enlarged
07. Fungating exophytic lesion
08. Intact
09. Atrophic
10. Grade II changes, capillary microaneurisms.
11. Enlarged to level of umbilicus
12. No abnormalities noted.
13. Supple.
14. 2 cm. ulcer on posterior wall at hymenal ring
15. 37°, 80, 18, 180/112
16. Obese
17. Not felt
18. Moist
19. Old third degree laceration.
20. Normal
21. Not palpable
22. Unremarkable
23. Right normal, papilledema of left disc.
24. Undistended
25. Physiologic
26. Marked nuchal rigidity
27. Well-formed
28. Well-formed
29. Well-developed, mod., obese W.F.
30. Unobstructed
31. Not enlarged
32. Nothing abnormal
33. Old mastectomy scar on left; right negative. No nodes
34. 1 cm. ulcer on left lateral wall (Middle 1/3)
35. Distended, tympanitic with hyperactive bowel sounds
36. Normal size no murmurs
37. Within normal limits
38. Tremendously obese with old laparotomy scar.
39. Left drum perforated
40. Mid-line
41. Not noted
42. Intact
43. Moderate enlargement, totally irregular rhythm, no murmurs
44. No abnormalities noted
45. No abnormalities felt
46. Atrophic
47. Examination unsatisfactory
48. Abnormality found; see other items.
49. Not enlarged, mid-position.
50. Not noted.
51. No masses or tenderness
52. All present and equal

1106a

GENERAL PHYSICAL EXAMINATION

Please select AS MANY of the items below as you wish to examine. In the proper column of the answer sheet, erase the code numbers of these items, and look up the findings with the corresponding code numbers on PAGE 6.

On the answer sheet, make your erasures in COLUMN 9.

TPR, BP	a
Hgt., wgt.	b
General description	c
Skin	d
Lymphatics	e
Head & face	f
Hair	g
Eyes	h
Ears	i
Nose	j
Mouth, teeth, throat	k
Neck	l
Trachea	m
Thyroid	n
Vessels	o
Chest	p
Breasts & axillae	q
Heart	r
Lungs	s
Abdomen	t
Liver, spleen, kidneys	u
Masses	v
Tenderness	w
Pelvic examination	x
Hair distribution	y
Ext. genitalia	z
SUB glands	A
Introitus & perineum	B
Vagina	C
Cervix	D
Uterus	E
Adnexa	F
Rectal	G
Sphincter	H
Masses	I
Back	J
Extremities	K
Pulses	L
Deep tendon reflexes	M
Neurological	N

DIRECTORY

Obtain more history. PAGE 5
Perform diagnostic studies and procedures. PAGE 9
Your diagnostic opinion. PAGE 11
Your plan of treatment. PAGE 13

INFORMATION

01. F 80, 1 hr. 110, 2 hr. 68, 3 hr. 80 (mgm%)
02. Negative
03. Non-reactive
04. Negative
05. Negative
06. Negative
07. Mixed mesodermal tumor of uterus
08. Left ventricular hypertrophy
09. No abnormalities
10. Na 140, K 3.8, Cl 98, CO_2 25.
11. Class I, atrophic smear
12. Report not available
13. Negative
14. Class IV (positive) malignant cells present.
15. Class II, estrogen effect.
16. No abnormalities
17. F 100, 1 hr. 220, 2 hr. 190, 3 hr. 140
18. Hct. 36, WBC 8,000, differential normal
19. Marked cardiac enlargement with hypertensive contour. Lung fields clear.
20. Less than 6% retention at 45 minutes.
21. Squamous cell carcinoma, invasive.
22. 180 mg%
23. 34% retention at 45 minutes.
24. Sp. gravity 1.010, pH 5.8, glucose 2+, acetone negative, albumin positive, microscopic: occasional WBC.
25. Chronic cervicitis with squamous metaplasia
26. Reactive, titer 1:64.
27. Report not available.
28. Chronic cervicitis
29. Report not available
30. Negative
31. 4 K-A units/ 100 ml.
32. Negative
33. Negative
34. Positive findings same as noted elsewhere.
35. Class III, suspicious. Suggest further studies.
36. Scattered spherical ("snowball") densities in both lung fields; minimal cardiac enlargement.
37. Endocervical tissue
38. Adenocarcinoma
39. 10 mgm%
40. Negative
41. Positive
42. Adenocarcinoma
43. Na 120, K 5.1, Cl 86, CO_2 11 (mEq/l)
44. Negative
45. Negative film. Heart normal size.
46. Negative
47. Hematocrit 23, WBC 6,000, hypochromic, microcytic anemia
48. 40% excretion in 15 minutes
49. Estrogenic hyperplasia
50. Negative
51. Left breast shadow absent; otherwise, negative chest film.
52. Adenocarcinoma, medullary type.

DIAGNOSTIC STUDIES AND PROCEDURES

Please select AS MANY of the items below as you wish to examine. In the proper column of the answer sheet, erase the code numbers of these items, and look up the findings with the corresponding code numbers on PAGE 8.

On the answer sheet, make your erasures in COLUMN 8.

Chemistries (Blood, serum)	Alk. phosphatase	a
	Bilirubin, direct, indirect	b
	Glucose, 2 hr., postprandial	c
	Electrolytes, Na, K, Cl, CO_2	d
	Urea Nitrogen (BUN)	e
Clinical & cyto-pathology	Stool for blood, OCP	f
	Vaginal pap smear	g
serology	VDRL	h
Hematology	Blood group & Rh	i
	CBC	j
Urine tests	Urinalysis, complete	k
X-rays	Abdomen	l
	Barium enema	m
	Chest	n
	Cholecystogram	o
	GI series	p
	Pelvis	q
	Pyelogram (IVP)	r
	Skull	s
	Spine	t
Procedures	BSP	u
	Cystoscopy	v
	Darkfield exam for T. Pallidum	w
	Electrocardiogram	x
	Examination under anesthesia	y
	Frei test	z
	Glucose tolerance test	A
	PPD or Tuberculin Test	B
	Proctosigmoidoscopy	C
	PSP	D
	Smears for Donovan bodies	E
	Smears for H. Ducreyi	F
Surg. Path Reports	Biopsy cervix (punch)	G
	Biopsy vagina (ulcer)	H
	Conization of cervix	I
	D&C, endocervix	J
	D&C, endometrium	K

After you have completed your studies and procedures, select from the list below the step which seems to you to be most appropriate, then turn to the PAGE indicated.

DIRECTORY

More history. PAGE 5
General physical examination. PAGE 7
Your diagnostic opinion. PAGE 11
Your plan of treatment. PAGE 13

PAGE 10

DIRECTORY

More history. PAGE 5
General physical examination. PAGE 7
Diagnostic studies and procedures. PAGE 9
Your diagnosis. PAGE 11
Your plan of treatment. PAGE 13

Be sure to complete both YOUR DIAGNOSIS (PAGE 11) and YOUR PLAN OF TREATMENT, PAGE 13 before you proceed to the next problem.

YOUR DIAGNOSIS

On the basis of the information now available to you, you should be able to select a provisional diagnosis upon which your further management of the case can be decided. From the list below select AS MANY diagnoses as seem applicable to this patient's problem.

Make your erasures in COLUMN 7

Adenoacanthoma, primary, of endometrium (stage unspecified)________ a
(specify stage if you can)
Stage I________ b
Stage II________ c
Stage III________ d
Stage IV________ e

Adenocarcinoma, primary, of cervix (stage unspecified)________ f
(specify stage if you can)
Stage 0________ g
Stage I________ h
Stage II________ i
Stage III________ j
Stage IV________ k

Adenocarcinoma, primary, of endometrium (stage unspecified)________ l
(specify stage if you can)
Stage I________ m
Stage II________ n
Stage III________ o
Stage IV________ p

Adenocarcinoma, primary, of vagina (stage unspecified)________ q
(specify stage if you can)
Stage I________ r
Stage II________ s
Stage III________ t
Stage IV________ u

Adenocarcinoma, metastatic from primary in breast________ v
(specify spread, if appropriate)
With spread to cervix________ w
With spread to lungs________ x
With spread to ovaries________ y
With spread to vagina________ z

Adenocarcinoma, metastatic from primary in colon________ A
(specify spread, if appropriate)
With spread to cervix________ B
With spread to lungs________ C
With spread to ovaries________ D
With spread to vagina________ E

Adenocarcinoma, metastatic from primary in ovary________ F
(specify spread, if appropriate)
With spread to cervix________ G
With spread to lungs________ H
With spread to vagina________ I

Carcinoma, squamous cell, of cervix (stage unspecified)________ J
(specify stage if you can)
Stage 0________ K
Stage I________ L
Stage II________ M
Stage III________ N
Stage IV________ O

Chancroid________ P
Diabetes mellitus________ Q
Exogenous obesity________ R
Granuloma inguinale________ S
Hypertensive vascular disease________ T
Lymphopathia venereum________ U
Pulmonary tuberculosis, active________ V
Pulmonary tuberculosis, inactive________ W
Positive serology________ X
Syphilis, active untreated________ Y

1116a

INFORMATION

In selecting your plan of management, you might (or might not) erase one of the following numbers. If you do so, you may find the information given below helpful.

01. Aortic lymph nodes are enlarged, and on biopsy and frozen section they show adenocarcinoma. Metastases to liver are also palpable. No evidence of peritoneal spread.
07. No evidence of extension beyond the uterus, no enlarged lymph nodes or signs of peritoneal spread.
13. Granulosa cell tumor of right ovary, small. No gross evidence of spread beyond ovary.
49. Patient dies on operating table of pulmonary edema.

YOUR PLAN OF TREATMENT

On the basis of the information now available to you, you should be able to outline a plan for managing this patient's present illness. You can assume that the long-term medical problems are under control. From the list below select AS MANY of the items as you think are appropriate. There are penalties for inappropriate choices. On the answer sheet, make your erasures in COLUMN 6.

ENDOCRINE TREATMENT

As initial treatment ________ a
After radiation ________ b
After surgery ________ c
Androgen therapy ________ d
Estrogen therapy ________ e
Progestational therapy ________ f
Continuous estrogen-progestin therapy ________ g
Cyclic estrogen-progestin therapy ________ h

RADIATION External

As initial treatment ________ j
After surgery ________ k
Conventional x-ray ________ l
Supervoltage or telecobalt ________ m
Cancericidal dosages to: Lung fields ________ n
Upper abdomen ________ o
Entire abdomen ________ p
Pelvic contents ________ q
Castrating dosage to: Ovaries ________ r

RADIATION Internal (radium)

As initial treatment ________ t
After surgery ________ u
Vaginal ovoids (only) ________ v
Dosage at vaginal mucosa 2-3000 r ________ w
5-6000 r ________ x
10-12,000 r ________ y

(Cumulative tumor dosages in roentgens, from all sources, including external)

Uterine tandem or Heyman's capsules (only) ________ z
Dosage at uterine surface 2-3000 r ________ A
5-6000 r ________ B
10-12,000 r ________ C
Uterine tandem and vaginal ovoids ________ D
Dosage at Point A 2500 r ________ E
7500 r ________ F
15,000 r ________ G
30,000 r ________ H
Dosage at Point B 2-3000 r ________ I
5-6000 r ________ J
10-12,000 r ________ K

SURGERY

As initial treatment ________ M
After radiation treatment ________ N
Exenteration of pelvis, anterior ________ O
Exenteration of pelvis, posterior ________ P
Exenteration of pelvis, total ________ Q
Laparotomy ________ R
Radical hysterectomy ________ S
Subtotal hysterectomy ________ T
Total hysterectomy ________ U
With omentectomy ________ V
With pelvic lymph node dissection ________ W
With salpingo-oophorectomy, bilateral ________ X
With salpingo-oophorectomy, unilateral ________ Y

APPENDIX C

SAMPLE ANSWER SHEETS (1964 & 1965)

(COVERED AND UNCOVERED)

				PAGE
C - 1	Covered with	8/21/64 2/17/65	front back added	77
C - 2	Uncovered with	8/21/64 2/17/65	front back added	79
C - 3	Covered	October, 1965		81
C - 4	Uncovered	October, 1965		82

ANSWER SHEET - A APPENDIX C-1

Student Test Number________________ Pledge________________

Name________________________________ Student Number____________
Last First Middle

School________________________________ Date____________

COLUMN

1	2	3	4	5	6	7	8	9	10
a	a	a	a	a	a	a	a	a	a
b	b	b	b	b	b	b	b	b	b
c	c	c	c	c	c	c	c	c	c
d	d	d	d	d	d	d	d	d	d
e	e	e	e	e	e	e	e	e	e
f	f	f	f	f	f	f	f	f	f
g	g	g	g	g	g	g	g	g	g
h	h	h	h	h	h	h	h	h	h
i	i	i	i	i	i	i	i	i	i
j	j	j	j	j	j	j	j	j	j
k	k	k	k	k	k	k	k	k	k
l	l	l	l	l	l	l	l	l	l
m	m	m	m	m	m	m	m	m	m
n	n	n	n	n	n	n	n	n	n
o	o	o	o	o	o	o	o	o	o
p	p	p	p	p	p	p	p	p	p
q	q	q	q	q	q	q	q	q	q
r	r	r	r	r	r	r	r	r	r
s	s	s	s	s	s	s	s	s	s
t	t	t	t	t	t	t	t	t	t
u	u	u	u	u	u	u	u	u	u
v	v	v	v	v	v	v	v	v	v
w	w	w	w	w	w	w	w	w	w
x	x	x	x	x	x	x	x	x	x
y	y	y	y	y	y	y	y	y	y
z	z	z	z	z	z	z	z	z	z
A	A	A	A	A	A	A	A	A	A
B	B	B	B	B	B	B	B	B	B
C	C	C	C	C	C	C	C	C	C
D	D	D	D	D	D	D	D	D	D
E	E	E	E	E	E	E	E	E	E
F	F	F	F	F	F	F	F	F	F
G	G	G	G	G	G	G	G	G	G
H	H	H	H	H	H	H	H	H	H
I	I	I	I	I	I	I	I	I	I
J	J	J	J	J	J	J	J	J	J
K	K	K	K	K	K	K	K	K	K
L	L	L	L	L	L	L	L	L	L
M	M	M	M	M	M	M	M	M	M
N	N	N	N	N	N	N	N	N	N
O	O	O	O	O	O	O	O	O	O
P	P	P	P	P	P	P	P	P	P
Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
R	R	R	R	R	R	R	R	R	R
S	S	S	S	S	S	S	S	S	S
T	T	T	T	T	T	T	T	T	T
U	U	U	U	U	U	U	U	U	U
V	V	V	V	V	V	V	V	V	V
W	W	W	W	W	W	W	W	W	W
X	X	X	X	X	X	X	X	X	X
Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Z	Z	Z	Z	Z	Z	Z	Z	Z	Z

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2/17/65 (mh)
8/21/64 (mh)

ANSWER SHEET - B

Student Test Number________________________ Pledge________________________

Name____ Student Number______________
Last   First   Middle

School____ Date________________________

COLUMN

11	12	13	14	15	16	17	18	19	20
a	a	a	a	a	a	a	a	a	a
b	b	b	b	b	b	b	b	b	b
c	c	c	c	c	c	c	c	c	c
d	d	d	d	d	d	d	d	d	d
e	e	e	e	e	e	e	e	e	e
f	f	f	f	f	f	f	f	f	f
g	g	g	g	g	g	g	g	g	g
h	h	h	h	h	h	h	h	h	h
i	i	i	i	i	i	i	i	i	i
j	j	j	j	j	j	j	j	j	j
k	k	k	k	k	k	k	k	k	k
l	l	l	l	l	l	l	l	l	l
m	m	m	m	m	m	m	m	m	m
n	n	n	n	n	n	n	n	n	n
o	o	o	o	o	o	o	o	o	o
p	p	p	p	p	p	p	p	p	p
q	q	q	q	q	q	q	q	q	q
r	r	r	r	r	r	r	r	r	r
s	s	s	s	s	s	s	s	s	s
t	t	t	t	t	t	t	t	t	t
u	u	u	u	u	u	u	u	u	u
v	v	v	v	v	v	v	v	v	v
w	w	w	w	w	w	w	w	w	w
x	x	x	x	x	x	x	x	x	x
y	y	y	y	y	y	y	y	y	y
z	z	z	z	z	z	z	z	z	z
A	A	A	A	A	A	A	A	A	A
B	B	B	B	B	B	B	B	B	B
C	C	C	C	C	C	C	C	C	C
D	D	D	D	D	D	D	D	D	D
E	E	E	E	E	E	E	E	E	E
F	F	F	F	F	F	F	F	F	F
G	G	G	G	G	G	G	G	G	G
H	H	H	H	H	H	H	H	H	H
I	I	I	I	I	I	I	I	I	I
J	J	J	J	J	J	J	J	J	J
K	K	K	K	K	K	K	K	K	K
L	L	L	L	L	L	L	L	L	L
M	M	M	M	M	M	M	M	M	M
N	N	N	N	N	N	N	N	N	N
O	O	O	O	O	O	O	O	O	O
P	P	P	P	P	P	P	P	P	P
Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
R	R	R	R	R	R	R	R	R	R
S	S	S	S	S	S	S	S	S	S
T	T	T	T	T	T	T	T	T	T
U	U	U	U	U	U	U	U	U	U
V	V	V	V	V	V	V	V	V	V
W	W	W	W	W	W	W	W	W	W
X	X	X	X	X	X	X	X	X	X
Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Z	Z	Z	Z	Z	Z	Z	Z	Z	Z

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ANSWER SHEET - A APPENDIX C-2

Student Test Number______________________________ Pledge______________________________

Name______________/______________________________ Student Number______________

Last First Middle

School____ Date______________________________

COLUMN

1	2	3	4	5	6	7	8	9	10
a 22	a 03	a 10	a 29	a 39	a 18	a 30	a 31	a 15	a 27
b 10	b 29	b 39	b 18	b 30	b 31	b 15	b 27	b 03	b 22
c 39	c 18	c 30	c 31	c 15	c 27	c 03	c 22	c 29	c 10
d 30	d 31	d 15	d 27	d 03	d 22	d 29	d 10	d 18	d 39
e 15	e 27	e 03	e 22	e 29	e 10	e 18	e 39	e 31	e 30
f 03	f 22	f 29	f 10	f 18	f 39	f 31	f 30	f 27	f 15
g 29	g 10	g 18	g 39	g 31	g 30	g 27	g 15	g 22	g 03
h 18	h 39	h 31	h 30	h 27	h 15	h 22	h 03	h 10	h 29
i 31	i 30	i 27	i 15	i 22	i 03	i 10	i 29	i 39	i 18
j 27	j 15	j 22	j 03	j 10	j 29	j 39	j 18	j 30	j 31
k 33	k 13	k 36	k 40	k 12	k 05	k 16	k 24	k 32	k 04
l 36	l 40	l 12	l 05	l 16	l 24	l 32	l 04	l 13	l 33
m 12	m 05	m 16	m 24	m 32	m 04	m 13	m 33	m 40	m 36
n 16	n 24	n 32	n 04	n 13	n 33	n 40	n 36	n 05	n 12
o 32	o 04	o 13	o 33	o 40	o 36	o 05	o 12	o 24	o 16
p 13	p 33	p 40	p 36	p 05	p 12	p 24	p 16	p 04	p 32
q 40	q 36	q 05	q 12	q 24	q 16	q 04	q 32	q 33	q 13
r 05	r 12	r 24	r 16	r 04	r 32	r 33	r 13	r 36	r 40
s 24	s 16	s 04	s 32	s 33	s 13	s 36	s 40	s 12	s 05
t 04	t 32	t 33	t 13	t 36	t 40	t 12	t 05	t 16	t 24
u 06	u 41	u 08	u 50	u 34	u 48	u 46	u 20	u 17	u 09
v 08	v 50	v 34	v 48	v 46	v 20	v 17	v 09	v 41	v 06
w 34	w 48	w 46	w 20	w 17	w 09	w 41	w 06	w 50	w 08
x 46	x 20	x 17	x 09	x 41	x 06	x 50	x 08	x 48	x 34
y 17	y 09	y 41	y 06	y 50	y 08	y 48	y 34	y 20	y 46
z 41	z 06	z 50	z 08	z 48	z 34	z 20	z 46	z 09	z 17
A 50	A 08	A 48	A 34	A 20	A 46	A 09	A 17	A 06	A 41
B 48	B 34	B 20	B 46	B 09	B 17	B 06	B 41	B 08	B 50
C 20	C 46	C 09	C 17	C 06	C 41	C 08	C 50	C 34	C 48
D 09	D 17	D 06	D 41	D 08	D 50	D 34	D 48	D 46	D 20
E 28	E 21	E 52	E 45	E 25	E 42	E 37	E 02	E 49	E 44
F 52	F 45	F 25	F 42	F 37	F 02	F 49	F 44	F 21	F 28
G 25	G 42	G 37	G 02	G 49	G 44	G 21	G 28	G 45	G 52
H 37	H 02	H 49	H 44	H 21	H 28	H 45	H 52	H 42	H 25
I 49	I 44	I 21	I 28	I 45	I 52	I 42	I 25	I 02	I 37
J 21	J 28	J 45	J 52	J 42	J 25	J 02	J 37	J 44	J 49
K 45	K 52	K 42	K 25	K 02	K 37	K 44	K 49	K 28	K 21
L 42	L 25	L 02	L 37	L 44	L 49	L 28	L 21	L 52	L 45
M 02	M 37	M 44	M 49	M 28	M 21	M 52	M 45	M 25	M 42
N 44	N 49	N 28	N 21	N 52	N 45	N 25	N 42	N 37	N 02
O 26	O 47	O 38	O 07	O 11	O 19	O 23	O 43	O 35	O 14
P 38	P 07	P 11	P 19	P 23	P 43	P 35	P 51	P 47	P 26
Q 11	Q 19	Q 23	Q 43	Q 35	Q 51	Q 47	Q 01	Q 07	Q 38
R 23	R 43	R 35	R 51	R 47	R 01	R 07	R 14	R 19	R 11
S 35	S 51	S 47	S 01	S 07	S 14	S 19	S 26	S 43	S 23
T 47	T 01	T 07	T 14	T 19	T 26	T 43	T 38	T 51	T 35
U 07	U 14	U 19	U 26	U 43	U 38	U 51	U 11	U 01	U 47
V 19	V 26	V 43	V 38	V 51	V 11	V 01	V 23	V 14	V 07
W 43	W 38	W 51	W 11	W 01	W 23	W 14	W 35	W 26	W 19
X 51	X 11	X 01	X 23	X 14	X 35	X 26	X 47	X 38	X 43
Y 01	Y 23	Y 14	Y 35	Y 26	Y 47	Y 38	Y 07	Y 11	Y 51
Z 14	Z 35	Z 26	Z 47	Z 38	Z 07	Z 11	Z 19	Z 23	Z 01

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2/17/65 (mh)
8/21/64 (mh)

ANSWER SHEET - B

Student Test Number______________________________Pledge________________________________

Name____Student Number____________
Last First Middle
School____Date______________________________

COLUMN

11		12		13		14		15		16		17		18		19		20	
a	18	a	30	a	31	a	15	a	27	a	22	a	03	a	10	a	29	a	39
b	31	b	15	b	27	b	03	b	22	b	10	b	29	b	39	b	18	b	30
c	27	c	03	c	22	c	29	c	10	c	39	c	18	c	30	c	31	c	15
d	22	d	29	d	10	d	18	d	39	d	30	d	31	d	15	d	27	d	03
e	10	e	18	e	39	e	31	e	30	e	15	e	27	e	03	e	22	e	29
f	39	f	31	f	30	f	27	f	15	f	03	f	22	f	29	f	10	f	18
g	30	g	27	g	15	g	22	g	03	g	29	g	10	g	18	g	39	g	31
h	15	h	22	h	03	h	10	h	29	h	18	h	39	h	31	h	30	h	27
i	03	i	10	i	29	i	39	i	18	i	31	i	30	i	27	i	15	i	22
j	29	j	39	j	18	j	30	j	31	j	27	j	15	j	22	j	03	j	10
k	05	k	16	k	24	k	32	k	04	k	33	k	13	k	36	k	40	k	12
l	24	l	32	l	04	l	13	l	33	l	36	l	40	l	12	l	05	l	16
m	04	m	13	m	33	m	40	m	36	m	12	m	05	m	16	m	24	m	32
n	33	n	40	n	36	n	05	n	12	n	16	n	24	n	32	n	04	n	13
o	36	o	05	o	12	o	24	o	16	o	32	o	04	o	13	o	33	o	40
p	12	p	24	p	16	p	04	p	32	p	13	p	33	p	40	p	36	p	05
q	16	q	04	q	32	q	33	q	13	q	40	q	36	q	05	q	12	q	24
r	32	r	33	r	13	r	36	r	40	r	05	r	12	r	24	r	16	r	04
s	13	s	36	s	40	s	12	s	05	s	24	s	16	s	04	s	32	s	33
t	40	t	12	t	05	t	16	t	24	t	04	t	32	t	33	t	13	t	36
u	48	u	46	u	20	u	17	u	09	u	06	u	41	u	08	u	50	u	34
v	20	v	17	v	09	v	41	v	06	v	08	v	50	v	34	v	48	v	46
w	09	w	41	w	06	w	50	w	08	w	34	w	48	w	46	w	20	w	17
x	06	x	50	x	08	x	48	x	34	x	46	x	20	x	17	x	09	x	41
y	08	y	48	y	34	y	20	y	46	y	17	y	09	y	41	y	06	y	50
z	34	z	20	z	46	z	09	z	17	z	41	z	06	z	50	z	08	z	48
A	46	A	09	A	17	A	06	A	41	A	50	A	08	A	48	A	34	A	20
B	17	B	06	B	41	B	08	B	50	B	48	B	34	B	20	B	46	B	09
C	41	C	08	C	50	C	34	C	48	C	20	C	46	C	09	C	17	C	06
D	50	D	34	D	48	D	46	D	20	D	09	D	17	D	06	D	41	D	08
E	42	E	37	E	02	E	49	E	44	E	28	E	21	E	52	E	45	E	25
F	02	F	49	F	44	F	21	F	28	F	52	F	45	F	25	F	42	F	37
G	44	G	21	G	28	G	45	G	52	G	25	G	42	G	37	G	02	G	49
H	28	H	45	H	52	H	42	H	25	H	37	H	02	H	49	H	44	H	21
I	52	I	42	I	25	I	02	I	37	I	49	I	44	I	21	I	28	I	45
J	25	J	02	J	37	J	44	J	49	J	21	J	28	J	45	J	52	J	42
K	37	K	44	K	49	K	28	K	21	K	45	K	52	K	42	K	25	K	02
L	49	L	28	L	21	L	52	L	45	L	42	L	25	L	02	L	37	L	44
M	21	M	52	M	45	M	25	M	42	M	02	M	37	M	44	M	49	M	28
N	45	N	25	N	42	N	37	N	02	N	44	N	49	N	28	N	21	N	52
O	19	O	23	O	43	O	35	O	14	O	26	O	47	O	38	O	07	O	11
P	43	P	35	P	51	P	47	P	26	P	38	P	07	P	11	P	19	P	23
Q	51	Q	47	Q	01	Q	07	Q	38	Q	11	Q	19	Q	23	Q	43	Q	35
R	01	R	07	R	14	R	19	R	11	R	23	R	43	R	35	R	51	R	47
S	14	S	19	S	26	S	43	S	23	S	35	S	51	S	47	S	01	S	07
T	26	T	43	T	38	T	51	T	35	T	47	T	01	T	07	T	14	T	19
U	38	U	51	U	11	U	01	U	47	U	07	U	14	U	19	U	26	U	43
V	11	V	01	V	23	V	14	V	07	V	19	V	26	V	43	V	38	V	51
W	23	W	14	W	35	W	26	W	19	W	43	W	38	W	51	W	11	W	01
X	35	X	26	X	47	X	38	X	43	X	51	X	11	X	01	X	23	X	14
Y	47	Y	38	Y	07	Y	11	Y	51	Y	01	Y	23	Y	14	Y	35	Y	26
Z	07	Z	11	Z	19	Z	23	Z	01	Z	14	Z	35	Z	26	Z	47	Z	38

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APPENDIX C-3

Column 0	Column 1 History	INDICATED	Column 2 Physical	INDICATED	Column 3 Tests and Procedures	CONTRA-INDICATED	INDICATED	Column 4 Diagnoses	EXCLUDED	NOT EXCLUDED	Column 5	ESTABLISHED OR MOST LIKELY DX	Column 6	Column 7	Column 8	Column 9
050	150	===	250	===	350	==	===	450	===	===	550	===	650===	750===	850===	950
051	151	===	251	===	351	==	===	451	===	===	551	===	651===	751===	851===	951
052	152	===	252	===	352	==	===	452	===	===	552	===	652===	752===	852===	952
053	153	===	253	===	353	==	===	453	===	===	553	===	653===	753===	853===	953
054	154	===	254	===	354	==	===	454	===	===	554	===	654===	754===	854===	954
055	155	===	255	===	355	==	===	455	===	===	555	===	655===	755===	855===	955
056	156	===	256	===	356	==	===	456	===	===	556	===	656===	756===	856===	956
057	157	===	257	===	357	==	===	457	===	===	557	===	657===	757===	857===	957
058	158	===	258	===	358	==	===	458	===	===	558	===	658===	758===	858===	958
059	159	===	259	===	359	==	===	459	===	===	559	===	659===	759===	859===	959
060	160	===	260	===	360	==	===	460	===	===	560	===	660===	760===	860===	960
061	161	===	261	===	361	==	===	461	===	===	561	===	661===	761===	861===	961
062	162	===	262	===	362	==	===	462	===	===	562	===	662===	762===	862===	962
063	163	===	263	===	363	==	===	463	===	===	563	===	663===	763===	863===	963
064	164	===	264	===	364	==	===	464	===	===	564	===	664===	764===	864===	964
065	165	===	265	===	365	==	===	465	===	===	565	===	665===	765===	865===	965
066	166	===	266	===	366	==	===	466	===	===	566	===	666===	766===	866===	966
067	167	===	267	===	367	==	===	467	===	===	567	===	667===	767===	867===	967
068	168	===	268	===	368	==	===	468	===	===	568	===	668===	768===	868===	968
069	169	===	269	===	369	==	===	469	===	===	569	===	669===	769===	869===	969
070	170	===	270	===	370	==	===	470	===	===	570	===	670===	770===	870===	970
071	171	===	271	===	371	==	===	471	===	===	571	===	671===	771===	871===	971
072	172	===	272	===	372	==	===	472	===	===	572	===	672===	772===	872===	972
073	173	===	273	===	373	==	===	473	===	===	573	===	673===	773===	873===	973
074	174	===	274	===	374	==	===	474	===	===	574	===	674===	774===	874===	974
075	175	===	275	===	375	==	===	475	===	===	575	===	675===	775===	875===	975
076	176	===	276	===	376	==	===	476	===	===	576	===	676===	776===	876===	976
077	177	===	277	===	377	==	===	477	===	===	577	===	677===	777===	877===	977
078	178	===	278	===	378	==	===	478	===	===	578	===	678===	778===	878===	978
079	179	===	279	===	379	==	===	479	===	===	579	===	679===	779===	879===	979
080	180	===	280	===	380	==	===	480	===	===	580	===	680===	780===	880===	980
081	181	===	281	===	381	==	===	481	===	===	581	===	681===	781===	881===	981
082	182	===	282	===	382	==	===	482	===	===	582	===	682===	782===	882===	982
083	183	===	283	===	383	==	===	483	===	===	583	===	683===	783===	883===	983
084	184	===	284	===	384	==	===	484	===	===	584	===	684===	784===	884===	984
085	185	===	285	===	385	==	===	485	===	===	585	===	685===	785===	885===	985
086	186	===	286	===	386	==	===	486	===	===	586	===	686===	786===	886===	986
087	187	===	287	===	387	==	===	487	===	===	587	===	687===	787===	887===	987
088	188	===	288	===	388	==	===	488	===	===	588	===	688===	788===	888===	988
089	189	===	289	===	389	==	===	489	===	===	589	===	689===	789===	889===	989
090	190	===	290	===	390	==	===	490	===	===	590	===	690===	790===	890===	990
091	191	===	291	===	391	==	===	491	===	===	591	===	691===	791===	891===	991
092	192	===	292	===	392	==	===	492	===	===	592	===	692===	792===	892===	992
093	193	===	293	===	393	==	===	493	===	===	593	===	693===	793===	893===	993
094	194	===	294	===	394	==	===	494	===	===	594	===	694===	794===	894===	994
095	195	===	295	===	395	==	===	495	===	===	595	===	695===	795===	895===	995
096	196	===	296	===	396	==	===	496	===	===	596	===	696===	796===	896===	996
097	197	===	297	===	397	==	===	497	===	===	597	===	697===	797===	897===	997
098	198	===	298	===	398	==	===	498	===	===	598	===	698===	798===	898===	998
099	199	===	299	===	399	==	===	499	===	===	599	===	699===	799===	899===	999

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APPENDIX C-4

Column 0		Column 1 History		Column 2 Physical		Column 3 Tests and Procedures		Column 4 Diagnoses			Column 5	Column 6	Column 7	Column 8	Column 9	
			INDICATED		INDICATED	CONTRA-INDICATED	INDICATED		EXCLUDED	NOT EXCLUDED	ESTABLISHED OR MOST LIKELY DX					
050	003	150	127===	250	215===	350===	331===	450	===	===	550===	650===	750===	850===	950	922
051	029	151	122===	251	203===	351===	327===	451	===	===	551===	651===	751===	851===	951	910
052	018	152	110===	252	229===	352===	322===	452	===	===	552===	652===	752===	852===	952	939
053	031	153	139===	253	218===	353===	310===	453	===	===	553===	653===	753===	853===	953	930
054	027	154	130===	254	231===	354===	339===	454	===	===	554===	654===	754===	854===	954	915
055	022	155	115===	255	227===	355===	330===	455	===	===	555===	655===	755===	855===	955	903
056	010	156	103===	256	222===	356===	315===	456	===	===	556===	656===	756===	856===	956	929
057	039	157	129===	257	210===	357===	303===	457	===	===	557===	657===	757===	857===	957	918
058	030	158	118===	258	239===	358===	329===	458	===	===	558===	658===	758===	858===	958	931
059	015	159	131===	259	230===	359===	318===	459	===	===	559===	659===	759===	859===	959	927
060	013	160	104===	260	232===	360===	324===	460	===	===	560===	660===	760===	860===	960	933
061	040	161	133===	261	213===	361===	304===	461	===	===	561===	661===	761===	861===	961	936
062	005	162	136===	262	240===	362===	333===	462	===	===	562===	662===	762===	862===	962	912
063	024	163	112===	263	205===	363===	336===	463	===	===	563===	663===	763===	863===	963	916
064	004	164	116===	264	224===	364===	312===	464	===	===	564===	664===	764===	864===	964	932
065	033	165	132===	265	204===	365===	316===	465	===	===	565===	665===	765===	865===	965	913
066	036	166	113===	266	233===	366===	332===	466	===	===	566===	666===	766===	866===	966	940
067	012	167	140===	267	236===	367===	313===	467	===	===	567===	667===	767===	867===	967	905
068	016	168	105===	268	212===	368===	340===	468	===	===	568===	668===	768===	868===	968	924
069	032	169	124===	269	216===	369===	305===	469	===	===	569===	669===	769===	869===	969	904
070	041	170	109===	270	217===	370===	320===	470	===	===	570===	670===	770===	870===	970	906
071	050	171	106===	271	241===	371===	309===	471	===	===	571===	671===	771===	871===	971	908
072	048	172	108===	272	200===	372===	306===	472	===	===	572===	672===	772===	872===	972	934
073	020	173	134===	273	248===	373===	308===	473	===	===	573===	673===	773===	873===	973	946
074	009	174	146===	274	220===	374===	334===	474	===	===	574===	674===	774===	874===	974	917
075	006	175	117===	275	209===	375===	346===	475	===	===	575===	675===	775===	875===	975	941
076	008	176	141===	276	206===	376===	317===	476	===	===	576===	676===	776===	876===	976	950
077	034	177	100===	277	208===	377===	341===	477	=	===	577===	677===	777===	877===	977	948
078	046	178	148===	278	234===	378===	300===	478	===	===	578===	678===	778===	878===	978	920
079	017	179	120===	279	246===	379===	348===	479	===	===	579===	679===	779===	879===	979	909
080	021	180	144===	280	249===	380===	302===	480	===	===	580===	680===	780===	880===	980	928
081	045	181	128===	281	221===	381===	344===	481	===	===	581===	681===	781===	881===	981	901
082	042	182	101===	282	245===	382===	328===	482	===	===	582===	682===	782===	882===	982	925
083	002	183	125===	283	242===	383===	301===	483	===	===	583===	683===	783===	883===	983	937
084	044	184	137===	284	202===	384===	325===	484	===	===	584===	684===	784===	884===	984	949
085	028	185	149===	285	244===	385===	337===	485	===	===	585===	685===	785===	885===	985	921
086	001	186	121===	286	228===	386===	349===	486	===	===	586===	686===	786===	886===	986	945
087	025	187	145===	287	201===	387===	321===	487	===	===	587===	687===	787===	887===	987	942
088	037	188	142===	288	225===	388===	345===	488	===	===	588===	688===	788===	888===	988	902
089	049	189	102===	289	237===	389===	342===	489	===	===	589===	689===	789===	889===	989	944
090	047	190	114===	290	235===	390===	343===	490	===	===	590===	690===	790===	890===	990	926
091	007	191	126===	291	247===	391===	314===	491	===	===	591===	691===	791===	891===	991	938
092	019	192	138===	292	207===	392===	326===	492	===	===	592===	692===	792===	892===	992	911
093	043	193	111===	293	219===	393===	338===	493	===	===	593===	693===	793===	893===	993	923
094	014	194	123===	294	243===	394===	311===	494	===	===	594===	694===	794===	894===	994	935
095	026	195	135===	295	214===	395===	323===	495	===	===	595===	695===	795===	895===	995	947
096	038	196	147===	296	226===	396===	335===	496	===	===	596===	696===	796===	896===	996	907
097	011	197	107===	297	238===	397===	347===	497	===	===	597===	697===	797===	897===	997	919
098	023	198	119===	298	211===	398===	307===	498	===	===	598===	698===	798===	898===	998	943
099	035	199	143===	299	223===	399===	319===	499	===	===	599===	699===	799===	899===	999	914

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4/14/65 (mmo)

APPENDIX D

RULES FOR SCORING PROBLEM-SOLVING TESTS

Note: PLEASE HAVE A COPY OF A TEST AND A COPY OF PANEL I IN FRONT OF YOU.

RULE ONE

1. Score each item before you look up the answer on the left-hand page of the examination booklet. If by previous exposure to the test, you already know the answer, score the item as if ______________________________

____

RULE TWO

2. Score the items as you come to them in the normal order of working up the patient.

For most non-emergency clinical situations, what is this normal order?

1. History
2. ____________________
3. ____________________
4. ____________________

3. In special emergency situations, the normal order may be quite different; examples:

Patient comes in in a coma, or is suddenly pulseless or apneic, etc.

The normal order of workup or management is the order an experienced physician would use, being guided by the information that is available to him up to that point. Obviously, if he were permitted to make retrospective judgements, he might wish he had chosen a ____________________ order.

4. Is this second rule clear?

THIS PROGRAMMED TEXT FOR THE 1965 EDITION OF THE TESTS WAS ABANDONED AND NOT USED IN THE PROJECT.

YOU DIDN'T KNOW THE ANSWER.

2. 1. HISTORY
   2. PHYSICAL EXAMINATION
   3. ROUTINE LAB WORK
   4. SPECIAL DIAGNOSTIC STUDIES

3. DIFFERENT

PANEL I.

SYMBOLS USED IN SCORING CLINICAL PROBLEM SOLVING TESTS

1. Diagnostic process (data-gathering)

L.	Routine (probability of positive finding not increased)
M	Indicated (probability of positive finding increased)
N	Not indicated (harmless, but neither routine nor indicated)
P	Contraindicated (minor hazard)
Q	Contraindicated (major hazard)

2. Diagnostic product (disease-labelling)

R	Correct primary diagnosis (most probable diagnosis which fits the data)
S	Unlikely diagnosis (it fits the data, but is improbable)
T	Partially correct diagnosis. (It doesn't really fit the data, but it is not hopelessly erroneous, either.)
U	Wrong diagnosis (wholly unacceptable)
X	Subsidiary diagnostic item
X_X, X_R, X_S, X_T, X_U,	Subsidiary diagnostic item implying that the subscript letter must also be scored whether or not the student marked it (i.e., X_R is marked, score both R and X_R)

3. Therapeutic product (treatment and disposition)

A	Best management (recommended at our institution)
B	Alternate correct management (often recommended at other institutions)
C	Acceptable management (may involve more risk or mutilation than necessary but is appropriate to problem)
D	Inadequate management. (Usually undertreatment, with non-fatal consequences)
E	Inappropriate management. (Involves grave unnecessary risks or major unnecessary mutilation)
F	Fatal mismanagement. (Whether by errors of omission or commission)
Z	Subsidiary diagnostic item
Z_Z, Z_A, Z_B, Z_C, Z_D, Z_E, Z_F,	Subsidiary diagnostic item implying that the subscript letter must also be scored whether or not the student marked it (i.e., Z_A is marked, score both A and Z_A)

4. Directory Item (refers student to another item or page)__________0

YOUR ANSWER	
	5. Sometimes a diagnostic procedure at one stage in the workup is not indicated at all; in fact, it may be contraindicated. Later on, in the light of further information it may become definitely indicated. The format of the test may not permit you to give different scores for doing the same procedure at different times. If this is the case, give the student the benefit of the doubt and score the item in the (more/less) favorable way.
. MORE	RULE THREE 6. To score an item, first decide in what category it belongs: 1. Data-gathering item 2. Diagnosis (disease-labelling) 3. Treatment or disposition 4. Directory item. Example: In a patient with a Class III Pap Smear, in what category would you place "fractional D&C and conization"?____________________
6. DATA-GATHERING	7. If the report of the D&C + conization were invasive carcinoma, and the next item was "refer the patient to a radiotherapist", in what category would you put it (choose one) Treatment Directory item - 0
7. TREATMENT	8. A treatment item is one which affects the welfare of the patient and is not primarily for the purpose of obtaining diagnostic information. Thus, depending on what its purpose, a D&C may be either a ____________ item or a ________________ item.
8. DIAGNOSTIC or TREATMENT	9. A directory item simply refers the student elsewhere in test. Its purpose is to help the student find his way through the test. The symbol for a directory item is __________.
9. 0 or NO	10. A directory item, refers the student to another item or page in the __________, a treatment item is one which affects the welfare of the patient and in its purpose is not primarily diagnostic. It may also refer the student to ____.

. TEST
ANOTHER ITEM OR PAGE

1. YOUR ANSWER
O

2. A DIAGNOSIS

13. R, ENTIRELY CORRECT

14. U, UNACCEPTABLE

15. T, PARTIALLY CORRECT OR
PARTIALLY INCORRECT

11. Is the distinction between directory and treatment items clear? YES/NO

What letter designates a directory item?__________

12. In a clinical problem-solving test, if an item is not a directory item, is not a diagnostic procedure, and is not a treatment item, what might it be?______________

13. Primary Diagnoses are to be scored in one of four categories:

- R. Entirely correct (the best and most likely diagnosis or diagnoses)
- S. Acceptable but unlikely (the chosen diagnosis fits the data, but other diagnoses are more likely).
- T. Partially incorrect (same as partially correc The diagnosis doesn't fit the data, but it's not hopelessly erroneous, either.
- U. Unacceptable (hopelessly wrong).

Example: A patient has invasive squamous cell cancer involving the cervix and upper vagina (only)

How would you score this answer; invasive squamous cell cancer of the cervix Stage IIa?______________

14. In this same patient, how would you score this answer?

Adenocarcinoma of the endometrium?___________

15. How about this?

Cancer of the vagina?___________

16. How would you score this answer?

Invasive cancer of the vagina with extension to the cervix?______________

16a. After a patient has several diagnoses, For example:

( ) Adenocarcinoma of the endometrium
( ) Essential hypertension
( ) Exogenous obesity
( ) Diabetes mellitus

Usually one of these is the most important. The other are secondary of lesser significance.

In the above list, mark the most important diagnosis a it were entirely correct, then score the other diagnostic items with an X.

a. (R) (X) (X) (X)	16b. Sometimes a subsidiary diagnostic item implies the primary one as well. Example: suppose a patient had an invasive squamous cell cancer strictly confined to the cervix, how would you score the following choices (use R's, X's, and U's)? Carcinoma, squamous cell, of cervix ( ) Stage 0________________( ) Stage I________________( ) Stage II________________( ) Stage III________________( ) Stage IV________________( )
b. (R) (U) (X) (U) (U)	16c. In this case the X (Stage I) implies R (carcinoma of the cervix) and therefore, the X is scored as if it were X + ________. To indicate this the X is given a subscript, making it X_R.
c. R	16d. Therefore, when any subsidiary diagnosis (X) implies a primary diagnosis this is indicated by adding the letter of the primary diagnosis (this may be an R, ________, ________, or a ________) as a subscript to the X. Examples X_R X_S X_T etc.
d. S, T, U.	17. All diagnostic procedures are classified as clinical __________ - ______________, whether they involve history taking, physical examination, laboratory tests, or __________________ surgery.
17. DATA-GATHERING, DIAGNOSTIC	18. Diagnostic procedures are divided into 5 categories L Routine M. Indicated N Not indicated P Contraindicated (minor hazard) Q Contraindicated (major hazard) In a normal, new OB patient, with negative past history and an apparently normal cervix, how could you classify a Pap Smear?______________________
18. L. ROUTINE In this case, the Pap Smear is a routine screening procedure and is not specially indicated by the facts at hand.	19. Suppose, on the other hand, the patient gave a history of having had abnormal Pap Smears in the past. How would you classify a Pap Smear now?______________

. M, INDICATED	20. The distinction between "routine" and "indicated" diagnostic procedures is an important one in scoring these tests. A "routine" procedure is one which may be helpful and should be done, but at the moment you decide to use it, the probability of a positive finding or abnormal result is not increased over what you would expect in a normal patient. In an apparently normal new OB patient with a negative history, hemoglobin or hematocrit would be ________.
"ROUTINE"	21. If this same patient were found to have tachycardia and mucosal pallor, a hemoglobin or hematocrit would be ________________.
"INDICATED"	22. In this classification, the distinction between "routi and "indicated" data-gathering procedures is based on ________________________________ ________________________________
THE INCREASED PROBABILITY OF A POSITIVE FINDING OR ABNORMAL RESULT.	23. In these tests, it often happens that a "routine" question or procedure yields an unexpected positive finding. Does this item then become "indicated"? YES/NO
NO. There was no increased probability of a positive result. Rules 1 and 2 apply.	24. A diagnostic procedure is "not indicated" if an experienced physician at this point in the workup would omit it and if it is apparently harmless as well as useless. It may, however, involve time, money, and discomfort. Examples: GI series or IVP in a (non-pregnant) patient with no GI or GU signs or symptoms. In this patient these procedures are ________ ________; these same procedures, in a patient with an early pregnancy would be ____________.
. NOT INDICATED CONTRAINDICATED (fetal hazard)	25. In scoring the tests, try not to penalize the student for misuse of the patient's time, money, and comfort in his clinical data-gathering. The only "contraindicated" items are those which are "not indicated" and also jeopardize the patient's ____________ ________________.

. SAFETY or WELFARE

26. "Contraindicated" data-gathering items refer only to diagnostic procedures, not to treatments (which may also be contraindicated, but are under a different classification). To be "contraindicated" a procedure must not only be irrelevant to the patient's problem, it must also pose a definite ____________ to the patient, or if she is pregnant to her ____________.

6. RISK, HAZARD, DANGER, EMBRYO, FETUS

27. The hazard may be minor or major.

Examples of minor hazards where procedure is not justified might be:

1. Cervical punch biopsy
2. Hystero-salpingography
3. Retrograde pyelogram
4. Unnecessary EUA

Examples of major hazards in injustified diagnost procedures might be:

1. Conization in pregnancy
2. "Paracentesis" of an ovarian cyst
3. Hystero-salpingography in a patient with pregnancy or acute P.I.D.

Thus, the same procedure under different circumstances may be classified____________________.

7. DIFFERENTLY

28. Using this classification of clinical data-gathering,

L Routine
M Indicated
N Not Indicated
P Contraindicated (minor hazard)
Q Contraindicated (major hazard)

please classify "cervical conization" under the following circumstances

1. Negative Pap Smear, normal appearing cervix, patient not pregnant __________
2. Negative Pap Smear, normal appearing cervix, patient in 1st trimester, history of habitual abortions __________
3. Class III Pap Smear, normal appearing cervix __________
4. Class III Pap Smear, small friable lesion on cervix __________

. 1. P - MINOR HAZARD
2. Q - MAJOR HAZARD (to fetus)
3. M - INDICATED
4. P - MINOR HAZARD
(increased tumor emboli;
punch biopsy preferable.)

9. PROBABLY NEVER
TREATMENT

30. TOTAL HYSTERECTOMY

29. Under what circumstances would conization be "routine"?

____

Categorize conization under this condition:

> Negative Pap Smear, non-pregnant patient, severely eroded, lacerated cervix.

In this case, is conization diagnostic?
In this case, is conization treatment?

30. Treatment is classified as follows:

Best management	A
Alternate management	B
Inadequate management	C
Inappropriate management	D
Fatal mismanagement	E

Best means "the best result possible with the least risk to the patient." In general, it should be restricted to the therapies recommended at this institution. (whether you like them or not)

Example: Treatment of cervical carcinoma-in-situ in a 45-year-old multipara:

1. conization and careful follow-up
2. total hysterectomy
3. TAH and BSO
4. Radical hysterectomy with partial vaginectomy

Which is the "Best" management ______________?

31. Therefore, total hysterectomy only would be scored A.

What about the others? Which one (or ones) should be classified as

Inadequate ___________?
Inappropriate ___________?
Fatal mismanagement ___________?

YOUR OPINION
n my opinion the correct answer s NONE. All these procedures hould be listed B, alternate orrect, because they are ecommended and practiced by xperienced clinicians working in nstitutions elsewhere, or as , acceptable, for similar reasons.

"BEST"

RECOMMENDED

INADEQUATE

31a. Alternate correct (B) managements are ones which are naturally recognized as being as appropriate for treating the patient's condition in question as the management we recommend here and involve no greater risk or mutilation of the patient than the __________ treatment.

32. "Acceptable" (C) managements may involve increased risk for the patient and/or a moderate amount of unnecessary mutilation. Examples

Laparotomy
Oophorectomy (unilateral in young patient; bilateral in older ones)
In creased pain or discomfort, etc.

The important feature is that the treatment be the management recommended by some national authority, but is not ____________________ here.

33. "Inadequate" (D) should be reserved for under-treatment which meets the following 3 conditions:

1. It is clearly not optimum or acceptable therapy by any standard
2. It does not mutilate the patient
3. It does not leave her to die of a fatal disease

Example: (as treatment of atrophic (senile) vaginitis): hot vinegar douches.

This treatment should be classified as ______________.

34. Many "inadequate" treatments may also be "inappropriate", but for the purpose of this scoring system, "inappropriate" implies

1. Grave risk to the patient's life or health, and/or
2. Major mutilation

Examples of major mutilation:

Unnecessary castration (young patient)
Unnecessary sterilization (young patient)
Unnecessary exenterative procedures, etc.

The The mismanagement, however, is not one that usually results in ____________________ of the patient.

4. DEATH	35. Fatal mismanagement means just what it says: The treatment-or lack of treatment-leads directly to the patient's death. There should be no problem here. But please note, if you cure a pregnant patient by a treatment which results in the unnecessary loss of the fetus, this is ____________________________.
5. E, FATAL MISMANAGEMENT	35a. Often a patient's management involves several steps and procedures which must be performed in a specified sequence. Only the first such step is given one of the above letters. Subsequent, or secondary treatment items are given the code letter Z. (with a subscript if appropriate). Example: In radiation treatment or cervical cancer Stage II, code the following treatment ( ) Intracavitary radium therapy with uterine tandem and vaginal ovoids Dose to Point A ( ) 2,500 r ( ) 7,500 r ( ) 15,000 r
5a. (A) (F) (Z_A) (F)	35b. The scoring of treatment items can be very complex, involving multiple pattern scores. When in doubt, use the letter O, to indicate a _______________ item or one which should not be scored.
5b. DIRECTORY	36. Do you remember and understand Rules 1 and 2? YES/NO
6. IF YOU DON'T, PLEASE START OVER	37. List the four categories into which all items are first divided: 1. 2. 3. 4.
7. DATA-GATHERING DIAGNOSIS TREATMENT DIRECTORY	38. Please go over the panel again, and make sure you understand the criteria for classifying items within each category. If you still have problems, get a live consultant to help you.

APPENDIX E

SAMPLE TEST A (1967)

This is the later edition of the 1964 and 1965 editions of Test A shown in Appendix B.

The decoding of this test is given in Appendix I.

9/28/65
12/6/65
5/5/67
1/16/68

CLINICAL PROBLEM-SOLVING TEST

This "clinical problem solving test" consists of a case presentation in a format which is designed to test your ability and judgment in the diagnosis and treatment of the patient's disorder. You are provided with a test booklet and a special answer sheet. The two must be used together. The test is divided into three parts.

Part I. Collecting information about the patient.
Part II. Defining the patient's diagnosis.
Part III. Specifying your plan of treatment for the patient.

For each part of the test, you will use a different portion of the answer sheet in a different way. You may work through the test or inspect any part of it in any order you choose, but please be careful to follow the special instructions for each section.

The test begins on PAGE 2.

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CASE PRESENTATION

A fifty-year-old woman comes to your office with a complaint of intermittent vaginal bleeding of six weeks' duration. She adds that this is the first vaginal bleeding she has noted since her menopause two years ago at age 48.

In this test, the further management of this patient is your responsibility. You will be asked to specify all steps necessary for diagnosis and treatment.

Please go on to PAGE 3.

Instructions for Collecting Information

Purpose. Pages 9, 11, and 15 of this test, labelled MORE HISTORY, PHYSICAL EXAMINATION, and DIAGNOSTIC STUDIES AND PROCEDURES, are designed to provide you with information about the patient, but they give you only the information you ask for.

Format of the Booklet. The right-hand (odd-numbered) side of each of the three pages contains a list of categories of parts of the history, parts of the physical examination, and various tests and procedures. Each item is followed by a number in the right-hand margin (HISTORY items begin with 150, PHYSICAL EXAMINATION 250, TESTS AND PROCEDURES with 350, etc.)

Exercise 1. Open the test booklet to page 9, 11, or 15. Inspect the right-hand side of the page, then return to PAGE 3 and complete Exercise 2.

Exercise 2. On the left-hand (even numbered) pages 8, 10 and 14, you will find that there is a column of numbers followed by a scrambled list of conflicting statements about the patient. Each statement is preceded by a number (beginning with 100 for history, 200 for physical examination, 300 for tests and procedures, etc.). Some statements in the list are directly applicable to your patient, others are irrelevant or bogus. The answer sheet is the key which tells you which information is applicable to the patient. After you have examined these pages, return to PAGE 5.

000. Read instructions on PAGE 5 FIRST.
001. Be sure you understand instructions on PAGE 5.
002. Be sure you understand instructions on PAGE 5.
003. Erase item 056 on answer sheet, and follow instructions on this page for the number you erase.
004. Be sure you understand instructions on PAGE 5.
005. Be sure you understand instructions on PAGE 5.
006. Be sure you understand instructions on PAGE 5.
007. Be sure you understand instructions on PAGE 5.
008. Be sure you understand instructions on PAGE 5.
009. Be sure you understand instructions on PAGE 5.
010. Proceed to Instruction #2.
011. Be sure you understand instructions on PAGE 5.
012. Be sure you understand instructions on PAGE 5.
013. Be sure you understand instructions on PAGE 5.
014. Be sure you understand instructions on PAGE 5.
015. Be sure you understand instructions on PAGE 5.
016. Be sure you understand instructions on PAGE 5.
017. Be sure you understand instructions on PAGE 5.
018. This is just to practice erasing numbers.
019. Be sure you understand instructions on PAGE 5.
020. Be sure you understand instructions on PAGE 5.
021. Be sure you understand instructions on PAGE 5.
022. Proceed to PAGE 6.
023. Be sure you understand instructions on PAGE 5.
024. Be sure you understand instructions on PAGE 5.
025. Be sure you understand instructions on PAGE 5.
026. Be sure you understand instructions on PAGE 5.
027. Proceed to Instruction #3 on PAGE 5.
028. Be sure you understand instructions on PAGE 5.
029. This is just to practice erasing numbers.
030. Be sure you understand instructions on PAGE 5.
031. This is just to practice erasing numbers.
032. Be sure you understand instructions on PAGE 5.
033. Be sure you understand instructions on PAGE 5.
034. Be sure you understand instructions on PAGE 5.
035. Be sure you understand instructions on PAGE 5.
036. Be sure you understand instructions on PAGE 5.
037. Be sure you understand instructions on PAGE 5.
038. Be sure you understand instructions on PAGE 5.
039. Be sure you understand instructions on PAGE 5.
040. Be sure you understand instructions on PAGE 5.
041. Be sure you understand instructions on PAGE 5.
042. Be sure you understand instructions on PAGE 5.
043. Be sure you understand instructions on PAGE 5.
044. Be sure you understand instructions on PAGE 5.
045. Be sure you understand instructions on PAGE 5.
046. Be sure you understand instructions on PAGE 5.
047. Be sure you understand instructions on PAGE 5.
048. Be sure you understand instructions on PAGE 5.
049. Be sure you understand instructions on PAGE 5.

Answer Sheet. The answer sheet consists of ten columns numbered from 0 to 9. The columns are made up of numbers in numerical order, ranging from 050 to 099 in column 0 to 950 to 999 in Column 9. Each of these numbers corresponds to the item with the same number on the right-hand page of the test booklet. To the right of each of the first four columns on the answer sheet, there is a stripe of erasable ink. Beneath this stripe there is a column of numbers in scrambled order. These concealed numbers correspond to numbered items on the left-hand (even numbered pages) of the test booklet. To obtain information about your patient, you must erase the proper areas in each stripe of the answer page, read the concealed numbers, then read the items with the corresponding numbers on the left-hand pages of the test booklet and be guided by the information you are given.

Exercise 3. The first column, Column 0, is for practice.

Instruction #1. On the answer sheet, in Column 0 please erase Item 050. When you have done so, Item 050 on the answer sheet should look like this:

050 003

Now look at Page 4 (opposite) and follow the instructions given for Item 003.

Instruction #2. If you followed the instructions for Item 003 on page 4, the top of Column 0 of the answer sheet should now look like this:

050	003
051	■
052	■
053	■
054	■
055	■
056	010
057	■
058	■

Now please practice erasing Items 051, 052, 053, and 054.

Instruction #3. If you have completed Instruction #2, the top of Column 0 should now look like this:

050	003
051	029
052	018
053	031
054	027
055	■
056	010
057	■
058	■

Now please erase Item 055 and follow instructions.

Scoring. The parts of this test dealing with history and physical examination have two requirements which must be completed in this order.

FIRST: You must assign a category to each item you erase before you erase it.

SECOND: You must erase the item in the proper column to get the information you need.

You will receive a score (positive or negative) for each numbered item in the test booklet whether you mark it or not. Please do not skip any items but consider each one carefully.

FIRST: All items in history and physical examination fall into one of these three categories:

1. Survey items used for screening, ruling out complications, or adding to useful general information about the patient.
2. Indicated items. These are ones where the collection of information is directly related to the patient's problem as it has presented itself to you. For example, in a patient with a history of hypertensive disease, determining the patient's blood pressure would be clearly an "indicated" item.
3. Useless items. These are items which have no bearing, direct or indirect, on the patient's problem and are considered valueless even for screening or survey purposes.

Go on to PAGE 7.

SECOND: Assigning Items to Categories:

1. If you consider that the item you plan to erase is "survey" and is likely to be useful only for screening or for general information or perhaps just to satisfy your curiosity, erase the item in the column marked "survey," like this:

S I

199 143 ▬

2. If you consider that the item you plan to erase is "indicated" by the nature of the patient's problem as you understand it at the moment, erase the item you want in the "indicated" column, like this:

S I

199 ▬ 143

3. If you consider the item to be useless but harmless, leave the item as it stands, like this:

S I

199 ▬ ▬

Changing Your Mind.

Once the number on the answer sheet has been erased, it can't be "recovered," so don't try to.

Instruction: Proceed to consider all items on PAGES 9 and 11.

Reminder: Be sure to consider each item. Remember that all items are scored, even the ones you leave unerased (the score may be positive or negative, depending on the item).

INFORMATION

100. Sometimes incontinent
101. Chronic alcoholic
102. Living and well
103. None
104. Has apartment in own house
105. Uses Ex-lax occasionally
106. Always "nervous."
107. College graduate
108. Frequent backaches
109. Periods 12x30x5 were prolonged and irregular for 3 years before menopause at 49.
110. Appendectomy at 23, left mastectomy at age 47
111. No operations
112. Teetotaler, on 1800 cal. diet
113. Wears glasses for reading
114. Asymptomatic
115. Had cancer of (?) at age 46. She and husband are separated.
116. Takes 1 gm. Tolbutamide daily
117. None
118. High school
119. Usual childhood diseases only
120. None
121. Hasn't felt well for years
122. None
123. Has been taking "female hormone" pills for "the change."
124. Occasional frequency, no dysuria
125. None
126. Lives with husband 57
127. Diabetes 10 years duration; syphilis 15 years ago, adequately treated. Breast cancer 3 years ago, treated by surgery.
128. No information available
129. All in Europe
130. Has diabetes and high blood pressure
131. Runs boarding house
132. No recent change
133. Spouse died 4 years ago of Tbc.
134. None
135. Gross hematuria (one day episode) 2 months ago.
136. Regular and satisfactory (friend rents room from her) but has had postcoital bleeding for 6 weeks.
137. Severe
138. Severe shortness of breath and minimal excretion
139. None
140. Sometimes has palpitations
141. Frequent occipital headaches
142. Died of cancer of the womb
143. Eats "what she pleases," mostly carbohydrates
144. Still bleeding
145. Suffers from hemorrhoids
146. None noted
147. Patient refuses to answer
148. You can't get here from there
149. Living and well

MORE HISTORY

You may assume that the Chief Complaint and Present Illness as given are complete and correct. For additional information please select AS MANY of the items below as interest you, erase the code numbers of these items in the proper column of the answer sheet, then find the information with the corresponding code numbers on the opposite page. On the answer sheet, make your erasures in COLUMN 1.

Past Medical History	Illnesses	150
	Injuries	151
	Operations	152
	Pregnancies	153
Family History	Father	154
	Mother	155
	Siblings	156
	Others	157
Social History	Schooling	158
	Occupation	159
	Home Environment	160
	Marital Situation	161
	Sex life	162
	Habits	163
	Drugs and Medicines	164
System Review	General (wgt., fever, weakness, etc.)	165
	HEENT	166
	CVR	167
	GI	168
	GU	169
	GYN	170
	NP	171
	Musculoskeletal	172

Make sure your erasures conform to the following code:

		S	I
Survey or screening item	199	143	▬
Indicated, essential item	199	▬	143
Useless but harmless item	199	▬	▬

When you have completed your work in this section, proceed to PAGE 11.

INFORMATION

200. Not noted
201. All present and equal
202. None palpable
203. 5'6", 170 lbs.
204. Well-formed, left mastectomy scar
205. Not enlarged
206. Not enlarged
207. Fungating exophytic lesion
208. Intact
209. Atrophic
210. Grade II changes, capillary microaneurisms
211. Enlarged to level of umbilicus
212. No abnormalities noted
213. Supple
214. 2 cm. ulcer on posterior wall at hymenal ring
215. 37°, 80, 18, 180/112
216. Obese
217. Not felt
218. Moist
219. Old third degree laceration
220. Normal
221. Not palpable
222. Unremarkable
223. Right normal, papilledema of left disc
224. Undistended
225. Physiologic
226. No masses or tenderness
227. Well-formed
228. Well-formed
229. Well-developed, W.F.
230. Unobstructed
231. Not enlarged
232. Nothing abnormal
233. Old mastectomy scar on left: right negative; no nodes
234. 1 cm. ulcer on left lateral wall (middle one-third)
235. Distended, tympanitic with hyperactive bowel sounds
236. Normal size, no murmurs
237. Within normal limits
238. Slightly obese with old laparotomy scar
239. Left drum perforated
240. Midline
241. Not noted
242. Intact
243. Moderate enlargement, totally irregular rhythm, no murmurs
244. No abnormalities noted
245. Confirms pelvic findings
246. Atrophic
247. Examination unsatisfactory
248. Pap smear taken, see report
249. Not enlarged, mid-position

GENERAL PHYSICAL EXAMINATION

Please select AS MANY of the items below as you wish to examine. In the proper column of the answer sheet, erase the code numbers of these items, and look up the findings with the corresponding code numbers on the opposite page.

On the answer sheet, make your erasures in COLUMN 2.

TPR, BP	250
Hgt., wgt.	251
General description	252
Skin	253
Lymphatics	254
Head and face	255
Hair	256
Eyes	257
Ears	258
Nose	259
Mouth, teeth, throat	260
Neck	261
Trachea	262
Thyroid	263
Vessels	264
Chest	265
Breasts and axillae	266
Heart	267
Lungs	268
Abdomen	269
Liver, spleen, kidneys	270
Masses	271
Tenderness	272
Pelvic examination	273
Hair distribution	274
Ext. genitalia	275
SUB glands	276
Introitus and perineum	277
Vagina	278
Cervix	279
Uterus	280
Adnexa	281
Rectal	282
Sphincter	283
Masses	284
Back	285
Extremities	286
Pulses	287
Deep tendon reflexes	288
Neurological	289

Make sure your erasures conform to the following code:

		S	I
Survey or screening item	199	143	▬
Indicated, essential item	199	▬	143
Useless, but harmless item	199	▬	▬

After you have completed your work in this section, proceed to PAGE 12.

INSTRUCTIONS FOR DIAGNOSTIC TESTS AND PROCEDURES

Scoring. The part of this test dealing with diagnostic tests and procedures is similar to the part dealing with history and physical examination, but has an additional requirement.

> You must erase the proper items in the proper category to get the information you need.

You will receive a score (positive or negative) for each numbered item in this part of the test whether you erase it or not. Please do not skip any items but consider each one carefully.

FIRST. All items fall into one of four categories:

1. Survey Items. These are items used for screening or survey or for ruling out complications, not directly related to the patient's primary illness.
2. Indicated Items. These are ones where the collection of information from diagnostic tests or procedures is directly related to the patient's problem as it has presented itself to you.
3. Useless Items. These are diagnostic tests and procedures which have no bearing, direct or indirect, on the patient's problem but are essentially harmless. They may, however, cost the patient time, money, and minor discomfort or anxiety.
4. Contraindicated Items. These are tests or procedures which subject the patient to unnecessary and unjustifiable risks, anxiety, pain, or discomfort.

Go on to PAGE 13.

SECOND.

1. If you consider that the item you plan to erase is "survey" and is useful for only screening or for general information, or perhaps just to satisfy your curiosity, erase the item in the column marked "survey," like this:

   C S I

   399 ▬ 319 ▬

2. If you consider that the item you plan to erase is clearly indicated by the nature of the patient's problem as you understand it at the moment, erase the item in the indicated colum, like this:

   C S I

   399 ▬ ▬ 319

3. If you consider the item to be useless but harmless, leave the item as it stands, like this:

   C S I

   399 ▬ ▬ ▬

4. If you consider the item to be "contraindicated," harmful, and not in the patient's interest, erase the item in the "contraindicated" column, like this: NO NUMBER WILL APPEAR

   C S I

   399 ▭ ▬ ▬

Instructions: Proceed to consider all items on PAGE 15.

Reminder: Be sure to consider each item. Remember that all items are scored, even the ones you leave unerased.

INFORMATION

300. Negative
301. Adenocarcinoma, medullary type
302. Negative
303. Non-reactive
304. Negative
305. Negative
306. Negative
307. Squamous cell carcinoma, invasive
308. Left ventricular hypertrophy
309. No abnormalities
310. Na 140, K 3.8, Cl 98, CO_2 25
311. Class I, atrophic smear
312. Report not available
313. Negative
314. Class IV (positive) malignant cells present
315. Class II, estrogen effect
316. No abnormalities
317. F 100, 1 hr. 220, 2 hr. 190, 3 hr. 140
318. Hct. 36, WBC 8,000, differential normal
319. Marked cardiac enlargement with hypertensive contour. Lung fields clear.
320. Less than 6% retention at 45 minutes.
321. Aortic lymph nodes are enlarged, and on biopsy and frozen section they show adenocarcinoma. Metastases to liver are also palpable. No evidence of peritoneal spread.
322. 180 mg%
323. No evidence of extension beyond the uterus; no enlarged lymph nodes or signs of peritoneal spread.
324. Specific gravity 1.010, pH 5.8 glucose 2+, acetone negative, albumin positive, microscopic: occasional WBC
325. Chronic cervicitis with squamous metaplasia
326. Reactive, titer 1:64.
327. Report not available
328. Chronic cervicitis
329. 0, Rh positive
330. Negative
331. 4 K-A units/100 ml.
332. Negative
333. Negative
334. Findings: same as noted elsewhere
335. Patient dies on operating table of pulmonary edema
336. Scattered spherical ("snowball") densities in both lung fields, minimal cardiac enlargement
337. Endocervical tissue
338. Adenocarcinoma
339. 10 mgm%
340. Negative
341. Positive
342. Chronic cervicitis
343. Na 120, K 5.1, Cl 86, CO_2 11 (mEq/L)
344. Negative
345. Negative film. Heart normal size
346. Negative
347. Hematocrit 23, WBC 6,000, hypochromic, microcytic anemia
348. 40% excretion in 15 minutes
349. Estrogenic hyperplasia

DIAGNOSTIC STUDIES AND PROCEDURES

Please select AS MANY of the items below as you wish to examine. In the proper column of the answer sheet, erase the code numbers of these items, and look up the findings with the corresponding code numbers on the opposite page.

On the answer sheet, make your erasures in COLUMN 3.

Chemistries (blood, serum)	Alk. phosphatase	350
	Bilirubin, direct, indirect	351
	Glucose, 2 hr. postprandial	352
	Electrolytes, Na, K, Cl, CO_2	353
	Urea Nitrogen (BUN)	354
Clinical & cytopathology serology	Stool for blood, OCP	355
	Cervico Vaginal Pap smear	356
	VDRL	357
Hematology	Blood group, and Rh	358
	CBC	359
Urine tests	Urinalysis, complete	360
X-rays	Abdomen	361
	Barium enema	362
	Chest	363
	Cholecystogram	364
	GI series	365
	Pelvis	366
	Pyelogram (IVP)	367
	Skull	368
	Spine	369
Procedures	BSP	370
	Cystoscopy	371
	Darkfield exam for T. Pallidum	372
	Electrocardiogram	373
	Examination under anesthesia	374
	Frei test	375
	Glucose tolerance test	376
	PPD or Tuberculin test	377
	Proctosigmoidoscopy	378
	PSP	379
	Smears for Donovan bodies	380
	Smears for H. Ducreyi	381
Diagnostic Surgery	Biopsy cervix (punch)	382
	Biopsy vagina	383
	Conization of cervix	384
	D & C, endocervix	385
	D & C, endometrium	386
	Exploratory laparotomy	387

Make sure that all your erasures conform to the following code:

		C	S	I
Survey or screening item	199	▬	143	▬
Indicated, essential item	199	▬	▬	143
Useless but harmless item	199	▬	▬	▬
Contraindicated, harmful item	199	▭	▬	▬

After you have completed your work in this section, proceed to PAGE 16.

PART II

YOUR DIAGNOSIS

DESCRIPTION OF PART II

The test booklet. This section of the test consists of lists of primary and secondary diagnoses which you are asked to divide into three categories:

1. Diagnoses which have been excluded by your history, physical exam, or diagnostic tests and procedures.
2. Diagnoses which were not excluded by your history, physical exam, or diagnostic tests and procedures.
3. Diagnoses which were established or rated most likely by your history, physical examination and/or diagnostic tests and procedures.

The answer sheet. Column 4 of the answer sheet consists of a column of numbers corresponding to the code numbers of the listed diagnoses. The column of numbers is followed by two columns of spaces in which you are to erase your answers as follows:

1. Column 4 EXCLUDED is for diagnoses you have excluded.
2. Column 4 NOT EXCLUDED is for diagnoses you have not excluded.

Instructions for PAGE 17.

FIRST: From the list on the opposite page, select all the diagnoses which your workup of history and/or physical examination and/or diagnostic studies and procedures has permitted you to exclude from further consideration. Erase each of these in the Column 4 EXCLUDED of the answer sheet, at its proper number.

SECOND: From the list on the opposite page, select all the diagnoses which you were unable to exclude by the choices of items of history, physical examination, and diagnostic tests and procedures which were available to you. Erase each of these in Column 4 NOT EXCLUDED of the answer sheet, at its corresponding number.

LIST OF DIAGNOSES
COLUMN 4

Adenoacanthoma, primary, of the endometrium	450
Adenocarcinoma, primary, of cervix	455
Adenocarcinoma, primary of endometrium	461
Adenocarcinoma, primary of vagina	466
Adenocarcinoma, metastatic from primary in breast	471
Adenocarcinoma, metastatic from primary in colon	476
Adenocarcinoma, metastatic from primary in ovary	481
Carcinoma, squamous cell, of cervix	485
Chancroid	491
Diabetes mellitus	492
Exogenous obesity	493
Granuloma inguinale	494
Hypertensive vascular disease	495
Lymphopathia venereum	496
Pulmonary tuberculosis, active	497
Pulmonary tuberculosis, inactive	498
Positive serology	499

Instructions: When you have completed this page, proceed to PAGE 18.

INSTRUCTIONS FOR PAGE 19

From your choice of the diagnoses which were not excluded by your workup, please indicate in the list on PAGE 19 the diagnoses which are definitely established or, of the choices given, most likely. Among competing or conflicting diagnoses, there can be only ONE which is most likely. The patient may, however, have a number of unrelated conditions in addition. Erase each of your selections in COLUMN 5 ESTABLISHED of the answer sheet, at its proper number.

ESTABLISHED OR MOST LIKELY DIAGNOSES
COLUMN 5

Adenoacanthoma, primary, of endometrium (stage unspecified)____550
Stage I____551
(specify stage if you can) Stage II____552
Stage III____553
Stage IV____554

Adenocarcinoma, primary of cervix (stage unspecified)____555
Stage 0____556
Stage I____557
(specify stage if you can) Stage II____558
Stage III____559
Stage IV____560

Adenocarcinoma, primary, of endometrium (stage unspecified)____561
Stage I____562
(specify stage if you can) Stage II____563
Stage III____564
Stage IV____565

Adenocarcinoma, primary of vagina (stage unspecified)____566
Stage I____567
(specify stage if you can) Stage II____568
Stage III____569
Stage IV____570

Adenocarcinoma, metastatic from primary in breast____571
With spread to cervix____572
(specify spread if appropriate) With spread to lungs____573
With spread to ovaries____574
With spread to vagina____575

Adenocarcinoma, metastatic from primary in colon____576
With spread to cervix____577
(specify spread if appropriate) With spread to lungs____578
With spread to ovaries____579
With spread to vagina____580

Adenocarcinoma, metastatic from primary in ovary____581
With spread to cervix____582
(specify spread if appropriate) With spread to lungs____583
With spread to vagina____584

Carcinoma, squamous cell of cervix (stage unspecified)____585
Stage 0____586
(specify stage if you can) Stage I____587
Stage II____588
Stage III____589
Stage IV____590

Chancroid____591
Diabetes mellitus____592
Exogenous obesity____593
Granuloma inguinale____594
Hypertensive vascular disease____595
Lymphopathia venereum____596
Pulmonary tuberculosis, active____597
Pulmonary tuberculosis, inactive____598
Positive serology____599

Instructions: When you have completed this and all preceding pages in Part II, proceed to PART III on PAGE 20.

PART III

YOUR PLAN OF TREATMENT

DESCRIPTION OF PART III

On the basis of the information which has been made available to you, you should not only be able to define your patient's problems, you should also be able to outline a plan of managing this patient's major illness. This part of the test is divided into two sections.

1. Selection and sequencing of methods of therapy. PAGE 21
2. Detailed treatments within each method of therapy. PAGE 23

Instructions for PAGE 21.

The opposite page offers a list of three methods of therapy in every possible combination and sequence. Please make ONE selection and record it in Column 6 of the answer sheet by erasing the overlay next to the appropriate code number.

SELECTION AND SEQUENCING OF METHODS OF THERAPY

COLUMN 6

Make one choice in COLUMN 6.

TREATMENT	
Hormonal therapy only	650
Radiation therapy only	651
Surgical therapy only	652
Hormonal therapy followed by radiation therapy	653
Hormonal therapy followed by surgical therapy	654
Radiation therapy followed by hormonal therapy	655
Radiation therapy followed by surgical therapy	656
Surgical therapy followed by hormonal therapy	657
Surgical therapy followed by radiation therapy	658
Hormonal, then radiation, then surgical therapy	659
Hormonal, then surgical, then radiation therapy	660
Radiation, then hormonal, then surgical therapy	661
Radiation, then surgical, then hormonal therapy	662
Surgical, then hormonal, then radiation therapy	663
Surgical, then radiation, then hormonal therapy	664
None of those listed	665

Erase your ONE choice, then proceed to PAGE 22.

INSTRUCTIONS FOR PAGE 23

Prerequisite.

Use the opposite page only after you have selected your sequence of treatment on PAGE 21 and recorded your choice in Column 6 of the answer sheet.

On the opposite page, select AS MANY items as you wish, but keep in mind that your choice must be related to the sequence of treatment you have previously chosen. Erase all of your choices on the answer sheet in Column 7.

Note: Columns 8 and 9 on the answer sheet are not used in this test.

DETAILED TREATMENTS
COLUMN 7

HORMONAL TREATMENT

(specify therapy)

Androgen therapy________________________750
Estrogen therapy________________________751
Progestational therapy________________________752
Continuous estrogen-progestin therapy________________________753
Cyclic estrogen-progestin therapy________________________754

RADIATION TREATMENT

A. External (specify source)

Conventional x-ray________________________760
Supervoltage or telecobalt________________________761

(specify targets)

Cancericidal dosage (>5,000r): lung fields________762
upper abdomen________763
entire abdomen________764
pelvic cavity________765
Castrating dosage (<2,500r): ovaries________766

B. Internal (specify source) (radium)

Vaginal ovoids________________________770
Uterine tandem________________________771
Heyman's capsules________________________772

(specify dosages)

Dose at vaginal mucosa (from vaginal ovoids
2,000-3,000 r________773
5,000-6,000 r________774
10,000-12,000 r________775
Dose at uterine surface (from Heyman's capsules or tandem)
2,000-3,000 r________776
5,000-6,000 r________777
10,000-12,000 r________778
Dose at Point A (from tandem, ovoids, and external sources)
2,000-5,000 r________779
7,500 r________780
15,000 r________781
Dose at Point B (from all sources)
5,000 r________782
10,000 r________783

SURGICAL TREATMENT

(For Laparotomy findings, see DIAGNOSTIC PROCEDURES on PAGE 15)

(specify procedures)

Exenteration of pelvis, anterior________________________785
Exenteration of pelvis, posterior________________________786
Exenteration of pelvis, total________________________787
Radical hysterectomy________________________788
Subtotal hysterectomy________________________789
Total hysterectomy________________________790
Omentectomy________________________791
Pelvic lymph node dissection________________________792
Salpingo-oophorectomy, bilateral________________________793
Salpingo-oophorectomy, unilateral________________________794

When you have finished this and all preceding pages, you have completed this test.

APPENDIX F

SAMPLE TEST A' (1967)

This is the latest edition of this test which has gone through the same editions as Test A (see Appendices B & E).

The decoding of this test is given in Appendix I.

9/28/65
12/6/65
5/5/67
1/16/68

CLINICAL PROBLEM-SOLVING TEST

This "clinical problem solving test" consists of a case presentation in a format which is designed to test your ability and judgment in the diagnosis and treatment of the patient's disorder. You are provided with a test booklet and a special answer sheet. The two must be used together. The test is divided into three parts.

Part I. Collecting information about the patient.
Part II. Defining the patient's diagnosis.
Part III. Specifying your plan of treatment for the patient.

For each part of the test, you will use a different portion of the answer sheet in a different way. You may work through the test or inspect any part of it in any order you choose, but please be careful to follow the special instructions for each section.

The test begins on PAGE 2.

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CASE PRESENTATION

A fifty-year-old woman comes to your office with a complaint of intermittent vaginal bleeding of six weeks' duration. She adds that this is the first vaginal bleeding she has noted since her menopause two years ago at age 48.

In this test, the further management of this patient is your responsibility. You will be asked to specify all steps necessary for diagnosis and treatment.

Please go on to PAGE 3.

Instructions for Collecting Information

Purpose. Pages 9, 11, and 15 of this test, labelled MORE HISTORY, PHYSICAL EXAMINATION, and DIAGNOSTIC STUDIES AND PROCEDURES, are designed to provide you with information about the patient, but they give you only the information you ask for.

Format of the Booklet. The right-hand (odd-numbered) side of each of the three pages contains a list of categories of parts of the history, parts of the physical examination, and various tests and procedures. Each item is followed by a number in the right-hand margin (HISTORY items begin with 150, PHYSICAL EXAMINATION 250, TESTS AND PROCEDURES with 350, etc.)

Exercise 1. Open the test booklet to page 9, 11, or 15. Inspect the right-hand side of the page, then return to PAGE 3 and complete Exercise 2.

Exercise 2. On the left-hand (even numbered) pages 8, 10 and 14, you will find that there is a column of numbers followed by a scrambled list of conflicting statements about the patient. Each statement is preceded by a number (beginning with 100 for history, 200 for physical examination, 300 for tests and procedures, etc.). Some statements in the list are directly applicable to your patient, others are irrelevant or bogus. The answer sheet is the key which tells you which information is applicable to the patient. After you have examined these pages, return to PAGE 5.

000. Read instructions on PAGE 5 FIRST.
001. Be sure you understand instructions on PAGE 5.
002. Be sure you understand instructions on PAGE 5.
003. Erase item 056 on answer sheet, and follow instructions on this page for the number you erase.
004. Be sure you understand instructions on PAGE 5.
005. Be sure you understand instructions on PAGE 5.
006. Be sure you understand instructions on PAGE 5.
007. Be sure you understand instructions on PAGE 5.
008. Be sure you understand instructions on PAGE 5.
009. Be sure you understand instructions on PAGE 5.
010. Proceed to Instruction #2.
011. Be sure you understand instructions on PAGE 5.
012. Be sure you understand instructions on PAGE 5.
013. Be sure you understand instructions on PAGE 5.
014. Be sure you understand instructions on PAGE 5.
015. Be sure you understand instructions on PAGE 5.
016. Be sure you understand instructions on PAGE 5.
017. Be sure you understand instructions on PAGE 5.
018. This is just to practice erasing numbers.
019. Be sure you understand instructions on PAGE 5.
020. Be sure you understand instructions on PAGE 5.
021. Be sure you understand instructions on PAGE 5.
022. Proceed to PAGE 6.
023. Be sure you understand instructions on PAGE 5.
024. Be sure you understand instructions on PAGE 5.
025. Be sure you understand instructions on PAGE 5.
026. Be sure you understand instructions on PAGE 5.
027. Proceed to Instruction #3 on PAGE 5.
028. Be sure you understand instructions on PAGE 5.
029. This is just to practice erasing numbers.
030. Be sure you understand instructions on PAGE 5.
031. This is just to practice erasing numbers.
032. Be sure you understand instructions on PAGE 5.
033. Be sure you understand instructions on PAGE 5.
034. Be sure you understand instructions on PAGE 5.
035. Be sure you understand instructions on PAGE 5.
036. Be sure you understand instructions on PAGE 5.
037. Be sure you understand instructions on PAGE 5.
038. Be sure you understand instructions on PAGE 5.
039. Be sure you understand instructions on PAGE 5.
040. Be sure you understand instructions on PAGE 5.
041. Be sure you understand instructions on PAGE 5.
042. Be sure you understand instructions on PAGE 5.
043. Be sure you understand instructions on PAGE 5.
044. Be sure you understand instructions on PAGE 5.
045. Be sure you understand instructions on PAGE 5.
046. Be sure you understand instructions on PAGE 5.
047. Be sure you understand instructions on PAGE 5.
048. Be sure you understand instructions on PAGE 5.
049. Be sure you understand instructions on PAGE 5.

Answer Sheet. The answer sheet consists of ten columns numbered from 0 to 9. The columns are made up of numbers in numerical order, ranging from 050 to 099 in column 0 to 950 to 999 in Column 9. Each of these numbers corresponds to the item with the same number on the right-hand page of the test booklet. To the right of each of the first four columns on the answer sheet, there is a stripe of erasable ink. Beneath this stripe there is a column of numbers in scrambled order. These concealed numbers correspond to numbered items on the left-hand (even numbered pages) of the test booklet. To obtain information about your patient, you must erase the proper areas in each stripe of the answer page, read the concealed numbers, then read the items with the corresponding numbers on the left-hand pages of the test booklet and be guided by the information you are given.

Exercise 3. The first column, Column 0, is for practice.

Instruction #1. On the answer sheet, in Column 0 please erase Item 050. When you have done so, Item 050 on the answer sheet should look like this:

050 003

Now look at Page 4 (opposite) and follow the instructions given for Item 003.

Instruction #2. If you followed the instructions for Item 003 on page 4, the top of Column 0 of the answer sheet should now look like this:

050 003
051 ■
052 ■
053 ■
054 ■
055 ■
056 010
057 ■
058 ■

Now please practice erasing Items 051, 052, 053, and 054.

Instruction #3. If you have completed Instruction #2, the top of Column 0 should now look like this:

050 003
051 029
052 018
053 031
054 027
055 ▬
056 010
057 ■
058 ■

Now please erase Item 055 and follow instructions.

Scoring. The parts of this test dealing with history and physical examination have two requirements which must be completed in this order.

FIRST: You must assign a category to each item you erase before you erase it.

SECOND: You must erase the item in the proper column to get the information you need.

You will receive a score (positive or negative) for each numbered item in the test booklet whether you mark it or not. Please do not skip any items but consider each one carefully.

FIRST: All items in history and physical examination fall into one of these three categories:

1. Survey items used for screening, ruling out complications, or adding to useful general information about the patient.
2. Indicated items. These are ones where the collection of information is directly related to the patient's problem as it has presented itself to you. For example, in a patient with a history of hypertensive disease, determining the patient's blood pressure would be clearly an "indicated" item.
3. Useless items. These are items which have no bearing, direct or indirect, on the patient's problem and are considered valueless even for screening or survey purposes.

Go on to PAGE 7.

SECOND: Assigning Items to Categories:

1. If you consider that the item you plan to erase is "survey" and is likely to be useful only for screening or for general information or perhaps just to satisfy your curiosity, erase the item in the column marked "survey," like this:

	S	I
199	143	▬

2. If you consider that the item you plan to erase is "indicated" by the nature of the patient's problem as you understand it at the moment, erase the item you want in the "indicated" column, like this:

	S	I
199	▬	143

3. If you consider the item to be useless but harmless, leave the item as it stands, like this:

	S	I
199	▬	▬

Changing Your Mind.

Once the number on the answer sheet has been erased, it can't be "recovered," so don't try to.

Instruction: Proceed to consider all items on PAGES 9 and 11.

Reminder: Be sure to consider each item. Remember that all items are scored, even the ones you leave unerased (the score may be positive or negative, depending on the item).

INFORMATION

100. Sometimes incontinent
101. Chronic alcoholic
102. Living and well
103. None
104. Has apartment in own house
105. Uses Ex-lax occasionally
106. Always "nervous"
107. College graduate
108. Frequent backache
109. Periods 12x30x5, were prolonged and irregular for 3 years before menopause at 48
110. None
111. No operations
112. Teetotaler, on 1800 cal. diet
113. Wears glasses for reading
114. Asymptomatic
115. Diabetes 10 years' duration; syphilis 15 years ago, adequately treated; breast cancer 8 years ago, treated by surgery
116. Takes 1 gm. Tolbutamide daily
117. Appendectomy at 23, left mastectomy at age 40
118. High school
119. Usual childhood diseases only
120. None
121. Hasn't felt well for years
122. None
123. Has been taking "female hormone" pills for years for "the change"
124. Occasional frequency, no dysuria
125. None
126. Lives with husband 57
127. Has diabetes and high blood pressure
128. No information available
129. All in Europe
130. Had cancer of (?) at age 46, and is separated from spouse
131. Runs boarding house
132. No recent change
133. Spouse died 4 years ago of Tbc.
134. None
135. Gross hematuria (one day episode) 2 months ago
136. Regular and satisfactory (friend rents room from her), but has had postcoital bleeding for 6 weeks
137. Severe
138. Severe shortness of breath and minimal excretion
139. None
140. Sometimes has palpitations
141. Frequent occipital headaches
142. Died of cancer of the womb
143. Eats "what she pleases," mostly carbohydrates
144. Still bleeding
145. Suffers from hemorrhoids
146. None noted
147. Patient refuses to answer
148. You can't get here from there
149. Living and well

MORE HISTORY

You may assume that the Chief Complaint and Present Illness as given are complete and correct. For additional information please select AS MANY of the items below as interest you, erase the code numbers of these items in the proper column of the answer sheet, then find the information with the corresponding code numbers on the opposite page. On the answer sheet, make your erasures in COLUMN 1.

Past Medical History	Illnesses	150
	Injuries	151
	Operations	152
	Pregnancies	153
Family History	Father	154
	Mother	155
	Siblings	156
	Others	157
Social History	Schooling	158
	Occupation	159
	Home Environment	160
	Marital Situation	161
	Sex life	162
	Habits	163
	Drugs and Medicines	164
System Review	General (wgt., fever, weakness, etc.)	165
	HEENT	166
	CVR	167
	GI	168
	GU	169
	GYN	170
	NP	171
	Musculoskeletal	172

Make sure your erasures conform to the following code:

		S	I
Survey or screening item	199	143	▬
Indicated, essential item	199	▬	143
Useless but harmless item	199	▬	▬

When you have completed your work in this section, proceed to PAGE 11.

INFORMATION

200. Not noted
201. All present and equal
202. None palpable
203. 5'0", 190 lbs.
204. Well-formed
205. Not enlarged
206. Not enlarged
207. Fungating exophytic lesion
208. Intact
209. Atrophic
210. Grade II changes, capillary microaneurisms
211. Enlarged to level of umbilicus
212. No abnormalities noted
213. Supple
214. 2 cm. ulcer on posterior wall at hymenal ring
215. 37°, 80, 18, 180/112
216. Obese
217. Not felt
218. Moist
219. Old third degree laceration
220. Normal
221. Not palpable
222. Unremarkable
223. Right normal, papilledema of left disc
224. Undistended
225. Physiologic
226. Old mastectomy scar on left; right negative. No nodes.
227. Well-formed
228. Well-formed
229. Well-developed, obese W. F.
230. Unobstructed
231. Not enlarged
232. Nothing abnormal
233. No abnormalities
234. Atrophic
235. Distended, tympanitic with hyperactive bowel sounds
236. Normal size, no murmurs
237. Within normal limits
238. Tremendously obese with old laparotomy scar
239. Left drum perforated
240. Midline
241. Not noted
242. Intact
243. Moderate enlargement, totally irregular rhythm, no murmurs
244. No abnormalities noted
245. Confirms pelvic findings
246. Atrophic
247. Examination unsatisfactory
248. Pap smear taken, see report
249. Not enlarged, mid-position

GENERAL PHYSICAL EXAMINATION

Please select AS MANY of the items below as you wish to examine. In the proper column of the answer sheet, erase the code numbers of these items, and look up the findings with the corresponding code numbers on the opposite page.

On the answer sheet, make your erasures in COLUMN 2.

TPR, BP	250
Hgt., wgt.	251
General description	252
Skin	253
Lymphatics	254
Head and face	255
Hair	256
Eyes	257
Ears	258
Nose	259
Mouth, teeth, throat	260
Neck	261
Trachea	262
Thyroid	263
Vessels	264
Chest	265
Breasts and axillae	266
Heart	267
Lungs	268
Abdomen	269
Liver, spleen, kidneys	270
Masses	271
Tenderness	272
Pelvic examination	273
Hair distribution	274
Ext. genitalia	275
SUB glands	276
Introitus and perineum	277
Vagina	278
Cervix	279
Uterus	280
Adnexa	281
Rectal	282
Sphincter	283
Masses	284
Back	285
Extremities	286
Pulses	287
Deep tendon reflexes	288
Neurological	289

Make sure your erasures conform to the following code:

		S	I
Survey or screening item	199	143	■
Indicated, essential item	199	■	143
Useless, but harmless item	199	■	■

After you have completed your work in this section, proceed to PAGE 12.

INSTRUCTIONS FOR DIAGNOSTIC TESTS AND PROCEDURES

Scoring. The part of this test dealing with diagnostic tests and procedures is similar to the part dealing with history and physical examination, but has an additional requirement.

> You must erase the proper items in the proper category to get the information you need.

You will receive a score (positive or negative) for each numbered item in this part of the test whether you erase it or not. Please do not skip any items but consider each one carefully.

FIRST. All items fall into one of four categories:

1. Survey Items. These are items used for screening or survey or for ruling out complications, not directly related to the patient's primary illness.
2. Indicated Items. These are ones where the collection of information from diagnostic tests or procedures is directly related to the patient's problem as it has presented itself to you.
3. Useless Items. These are diagnostic tests and procedures which have no bearing, direct or indirect, on the patient's problem but are essentially harmless. They may, however, cost the patient time, money, and minor discomfort or anxiety.
4. Contraindicated Items. These are tests or procedures which subject the patient to unnecessary and unjustifiable risks, anxiety, pain, or discomfort.

Go on to PAGE 13.

SECOND.

1. If you consider that the item you plan to erase is "survey" and is useful for only screening or for general information, or perhaps just to satisfy your curiosity, erase the item in the column marked "survey," like this:

	C	S	I
399	▬	319	▬

2. If you consider that the item you plan to erase is clearly indicated by the nature of the patient's problem as you understand it at the moment, erase the item in the indicated colum, like this:

	C	S	I
399	▬	▬	319

3. If you consider the item to be useless but harmless, leave the item as it stands, like this:

	C	S	I
399	▬	▬	▬

4. If you consider the item to be "contraindicated," harmful, and not in the patient's interest, erase the item in the "contraindicated" column, like this: NO NUMBER WILL APPEAR

	C	S	I
399	▭	▬	▬

Instructions: Proceed to consider all items on PAGE 15.

Reminder: Be sure to consider each item. Remember that all items are scored, even the ones you leave unerased.

INFORMATION

300. Negative
301. Not indicated
302. Negative
303. Non-reactive
304. Negative
305. Negative
306. Negative
307. Squamous cell carcinoma, invasive
308. Left ventricular hypertrophy
309. No abnormalities
310. Na 140, K 3.8, Cl 98, CO_2 25
311. Class I, atrophic smear
312. Report not available
313. Negative
314. Class II, estrogen effect
315. Class IV (positive) malignant cells present
316. No abnormalities
317. F 100, 1 hr. 220, 2 hr. 190, 3 hr. 140
318. Hct. 36, WBC 8,000, differential normal
319. Marked cardiac enlargement with hypertensive contour. Left breast shadow absent.
320. Less than 6% retention at 45 minutes
321. No evidence of extension beyond the uterus, no enlarged lymph nodes or signs of peritoneal spread.
322. 180 mg%
323. Aortic lymph nodes are enlarged, and on biopsy and frozen section they show adenocarcinoma. Metastases to liver are also palpable. No evidence of peritoneal spread.
324. Specific gravity 1.010, pH 5.8, glucose 2+, acetone negative, albumin positive, microscopic: occasional WBC
325. Adenocarcinoma
326. Reactive, titer 1:64
327. Report not available
328. Adenocarcinoma
329. O, Rh positive
330. Negative
331. 4 K-A units/100 ml.
332. Negative
333. Negative
334. Findings: same as noted elsewhere
335. Patient dies on operating table of pulmonary edema
336. Negative film. Heart normal size.
337. Adenocarcinoma
338. F 80, 1 hr. 110, 2 hr. 68, 3 hr. 80
339. 10 mg%
340. Negative
341. Positive
342. Chronic cervicitis
343. Na 120, K 5.1, Cl 86, CO_2 11 (mEq/L)
344. Negative
345. Scattered spherical ("snowball") densities in both lung fields, minimum cardiac enlargement
346. Negative
347. Hematocrit 23, WBC 6,000, hypochromic, microcytic anemia
348. 40% excretion in 15 minutes
349. Estrogenic hyperplasia

DIAGNOSTIC STUDIES AND PROCEDURES

Please select AS MANY of the items below as you wish to examine. In the proper column of the answer sheet, erase the code numbers of these items, and look up the findings with the corresponding code numbers on the opposite page.

On the answer sheet, make your erasures in COLUMN 3.

Chemistries (blood, serum)	Alk. phosphatase	350
	Bilirubin, direct, indirect	351
	Glucose, 2 hr. postprandial	352
	Electrolytes, Na, K, Cl, CO_2	353
	Urea Nitrogen (BUN)	354
Clinical & cytopathology serology	Stool for blood, OCP	355
	Cervico Vaginal Pap smear	356
	VDRL	357
Hematology	Blood group, and Rh	358
	CBC	359
Urine tests	Urinalysis, complete	360
X-rays	Abdomen	361
	Barium enema	362
	Chest	363
	Cholecystogram	364
	GI series	365
	Pelvis	366
	Pyelogram (IVP)	367
	Skull	368
	Spine	369
Procedures	BSP	370
	Cystoscopy	371
	Darkfield exam for T. Pallidum	372
	Electrocardiogram	373
	Examination under anesthesia	374
	Frei test	375
	Glucose tolerance test	376
	PPD or Tuberculin test	377
	Proctosigmoidoscopy	378
	PSP	379
	Smears for Donovan bodies	380
	Smears for H. Ducreyi	381
Diagnostic Surgery	Biopsy cervix (punch)	382
	Biopsy vagina	383
	Conization of cervix	384
	D & C, endocervix	385
	D & C, endometrium	386
	Exploratory laparotomy	387

Make sure that all your erasures conform to the following code:

		C	S	I
Survey or screening item	199	▬	143	▬
Indicated, essential item	199	▬	▬	143
Useless but harmless item	199	▬	▬	▬
Contraindicated, harmful item	199	▭	▬	▬

After you have completed your work in this section, proceed to PAGE 16.

PART II

YOUR DIAGNOSIS

DESCRIPTION OF PART II

The test booklet. This section of the test consists of lists of primary and secondary diagnoses which you are asked to divide into three categories:

1. Diagnoses which have been excluded by your history, physical exam, or diagnostic tests and procedures.
2. Diagnoses which were not excluded by your history, physical exam, or diagnostic tests and procedures.
3. Diagnoses which were established or rated most likely by your history, physical examination and/or diagnostic tests and procedures.

The answer sheet. Column 4 of the answer sheet consists of a column of numbers corresponding to the code numbers of the listed diagnoses. The column of numbers is followed by two columns of spaces in which you are to erase your answers as follows:

1. Column 4 EXCLUDED is for diagnoses you have excluded.
2. Column 4 NOT EXCLUDED is for diagnoses you have not excluded.

Instructions for PAGE 17.

FIRST: From the list on the opposite page, select all the diagnoses which your workup of history and/or physical examination and/or diagnostic studies and procedures has permitted you to exclude from further consideration. Erase each of these in the Column 4 EXCLUDED of the answer sheet, at its proper number.

SECOND: From the list on the opposite page, select all the diagnoses which you were unable to exclude by the choices of items of history, physical examination, and diagnostic tests and procedures which were available to you. Erase each of these in Column 4 NOT EXCLUDED of the answer sheet, at its corresponding number.

LIST OF DIAGNOSES
COLUMN 4

Adenoacanthoma, primary, of the endometrium	450
Adenocarcinoma, primary, of cervix	455
Adenocarcinoma, primary of endometrium	461
Adenocarcinoma, primary of vagina	466
Adenocarcinoma, metastatic from primary in breast	471
Adenocarcinoma, metastatic from primary in colon	476
Adenocarcinoma, metastatic from primary in ovary	481
Carcinoma, squamous cell, of cervix	485
Chancroid	491
Diabetes mellitus	492
Exogenous obesity	493
Granuloma inguinale	494
Hypertensive vascular disease	495
Lymphopathia venereum	496
Pulmonary tuberculosis, active	497
Pulmonary tuberculosis, inactive	498
Positive serology	499

Instructions: When you have completed this page, proceed to PAGE 18.

INSTRUCTIONS FOR PAGE 19

From your choice of the diagnoses which were not excluded by your workup, please indicate in the list on PAGE 19 the diagnoses which are definitely established or, of the choices given, most likely. Among competing or conflicting diagnoses, there can be only ONE which is most likely. The patient may, however, have a number of unrelated conditions in addition. Erase each of your selections in COLUMN 5 ESTABLISHED of the answer sheet, at its proper number.

9/28/65
1/16/68

ESTABLISHED OR MOST LIKELY DIAGNOSES
COLUMN 5

Adenoacanthoma, primary, of endometrium (stage unspecified)__________550
Stage I__________551
(specify stage if you can) Stage II__________552
Stage III__________553
Stage IV__________554

Adenocarcinoma, primary of cervix (stage unspecified)__________555
Stage 0__________556
Stage I__________557
(specify stage if you can) Stage II__________558
Stage III__________559
Stage IV__________560

Adenocarcinoma, primary, of endometrium (stage unspecified)__________561
Stage I__________562
(specify stage if you can) Stage II__________563
Stage III__________564
Stage IV__________565

Adenocarcinoma, primary of vagina (stage unspecified)__________566
Stage I__________567
(specify stage if you can) Stage II__________568
Stage III__________569
Stage IV__________570

Adenocarcinoma, metastatic from primary in breast__________571
With spread to cervix__________572
(specify spread if appropriate) With spread to lungs__________573
With spread to ovaries__________574
With spread to vagina__________575

Adenocarcinoma, metastatic from primary in colon__________576
With spread to cervix__________577
(specify spread if appropriate) With spread to lungs__________578
With spread to ovaries__________579
With spread to vagina__________580

Adenocarcinoma, metastatic from primary in ovary__________581
With spread to cervix__________582
(specify spread if appropriate) With spread to lungs__________583
With spread to vagina__________584

Carcinoma, squamous cell of cervix (stage unspecified)__________585
Stage 0__________586
(specify stage if you can) Stage I__________587
Stage II__________588
Stage III__________589
Stage IV__________590

Chancroid__________591
Diabetes mellitus__________592
Exogenous obesity__________593
Granuloma inguinale__________594
Hypertensive vascular disease__________595
Lymphopathia venereum__________596
Pulmonary tuberculosis, active__________597
Pulmonary tuberculosis, inactive__________598
Positive serology__________599

Instructions: When you have completed this and all preceding pages in Part II, proceed to PART III on PAGE 20.

PART III

YOUR PLAN OF TREATMENT

DESCRIPTION OF PART III

On the basis of the information which has been made available to you, you should not only be able to define your patient's problems, you should also be able to outline a plan of managing this patient's major illness. This part of the test is divided into two sections.

1. Selection and sequencing of methods of therapy. PAGE 21
2. Detailed treatments within each method of therapy. PAGE 23

Instructions for PAGE 21.

The opposite page offers a list of three methods of therapy in every possible combination and sequence. Please make ONE selection and record it in Column 6 of the answer sheet by erasing the overlay next to the appropriate code number.

SELECTION AND SEQUENCING OF METHODS OF THERAPY

COLUMN 6

Make one choice in COLUMN 6.

TREATMENT	
Hormonal therapy only	650
Radiation therapy only	651
Surgical therapy only	652
Hormonal therapy followed by radiation therapy	653
Hormonal therapy followed by surgical therapy	654
Radiation therapy followed by hormonal therapy	655
Radiation therapy followed by surgical therapy	656
Surgical therapy followed by hormonal therapy	657
Surgical therapy followed by radiation therapy	658
Hormonal, then radiation, then surgical therapy	659
Hormonal, then surgical, then radiation therapy	660
Radiation, then hormonal, then surgical therapy	661
Radiation, then surgical, then hormonal therapy	662
Surgical, then hormonal, then radiation therapy	663
Surgical, then radiation, then hormonal therapy	664
None of those listed	665

Erase your ONE choice, then proceed to PAGE 22.

INSTRUCTIONS FOR PAGE 23

Prerequisite.

Use the opposite page only after you have selected your sequence of treatment on PAGE 21 and recorded your choice in Column 6 of the answer sheet.

On the opposite page, select AS MANY items as you wish, but keep in mind that your choice must be related to the sequence of treatment you have previously chosen. Erase all of your choices on the answer sheet in Column 7.

Note: Columns 8 and 9 on the answer sheet are not used in this test.

DETAILED TREATMENTS
COLUMN 7

HORMONAL TREATMENT	Androgen therapy		750
	Estrogen therapy		751
(specify therapy)	Progestational therapy		752
	Continuous estrogen-progestin therapy		753
	Cyclic estrogen-progestin therapy		754
RADIATION TREATMENT			
A. External (specify source)	Conventional x-ray		760
	Supervoltage or telecobalt		761
(specify targets)	Cancericidal dosage (>5,000r):	lung fields	762
		upper abdomen	763
		entire abdomen	764
		pelvic cavity	765
	Castrating dosage (<2,500r):	ovaries	766
B. Internal (specify source)	Vaginal ovoids		770
(radium)	Uterine tandem		771
	Heyman's capsules		772
(specify dosages)	Dose at vaginal mucosa	2,000-3,000 r	773
	(from vaginal ovoids	5,000-6,000 r	774
		10,000-12,000 r	775
	Dose at uterine surface	2,000-3,000 r	776
	(from Heyman's capsules	5,000-6,000 r	777
	or tandem)	10,000-12,000 r	778
	Dose at Point A	2,000-5,000 r	779
	(from tandem, ovoids, and	7,500 r	780
	external sources)	15,000 r	781
	Dose at Point B	5,000 r	782
	(from all sources)	10,000 r	783

SURGICAL TREATMENT (For Laparotomy findings, see DIAGNOSTIC PROCEDURES on PAGE 15)

	Exenteration of pelvis, anterior	785
	Exenteration of pelvis, posterior	786
	Exenteration of pelvis, total	787
(specify procedures)	Radical hysterectomy	788
	Subtotal hysterectomy	789
	Total hysterectomy	790
	Omentectomy	791
	Pelvic lymph node dissection	792
	Salpingo-oophorectomy, bilateral	793
	Salpingo-oophorectomy, unilateral	794

When you have finished this and all preceding pages, you have completed this test.

APPENDIX G

SAMPLE TEST A (1967)

This is the latest edition of this test which has gone through the same editions as Test A (see Appendices B & E).

The decoding of this test is given in Appendix I.

9/28/65
12/6/65
5/5/67
1/16/68

CLINICAL PROBLEM-SOLVING TEST

This "clinical problem solving test" consists of a case presentation in a format which is designed to test your ability and judgment in the diagnosis and treatment of the patient's disorder. You are provided with a test booklet and a special answer sheet. The two must be used together. The test is divided into three parts.

Part I.	Collecting information about the patient.
Part II.	Defining the patient's diagnosis.
Part III.	Specifying your plan of treatment for the patient.

For each part of the test, you will use a different portion of the answer sheet in a different way. You may work through the test or inspect any part of it in any order you choose, but please be careful to follow the special instructions for each section.

The test begins on PAGE 2.

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May 1967 (tc)

CASE PRESENTATION

A fifty-year-old woman comes to your office with a complaint of intermittent vaginal bleeding of six weeks' duration. She adds that this is the first vaginal bleeding she has noted since her menopause two years ago at age 48.

In this test, the further management of this patient is your responsibility. You will be asked to specify all steps necessary for diagnosis and treatment.

Please go on to PAGE 3.

Instructions for Collecting Information

Purpose. Pages 9, 11, and 15 of this test, labelled MORE HISTORY, PHYSICAL EXAMINATION, and DIAGNOSTIC STUDIES AND PROCEDURES, are designed to provide you with information about the patient, but they give you only the information you ask for.

Format of the Booklet. The right-hand (odd-numbered) side of each of the three pages contains a list of categories of parts of the history, parts of the physical examination, and various tests and procedures. Each item is followed by a number in the right-hand margin (HISTORY items begin with 150, PHYSICAL EXAMINATION 250, TESTS AND PROCEDURES with 350, etc.)

Exercise 1. Open the test booklet to page 9, 11, or 15. Inspect the right-hand side of the page, then return to PAGE 3 and complete Exercise 2.

Exercise 2. On the left-hand (even numbered) pages 8, 10 and 14, you will find that there is a column of numbers followed by a scrambled list of conflicting statements about the patient. Each statement is preceded by a number (beginning with 100 for history, 200 for physical examination, 300 for tests and procedures, etc.). Some statements in the list are directly applicable to your patient, others are irrelevant or bogus. The answer sheet is the key which tells you which information is applicable to the patient. After you have examined these pages, return to PAGE 5.

000. Read instructions on PAGE 5 FIRST.
001. Be sure you understand instructions on PAGE 5.
002. Be sure you understand instructions on PAGE 5.
003. Erase item 056 on answer sheet, and follow instructions on this page for the number you erase.
004. Be sure you understand instructions on PAGE 5.
005. Be sure you understand instructions on PAGE 5.
006. Be sure you understand instructions on PAGE 5.
007. Be sure you understand instructions on PAGE 5.
008. Be sure you understand instructions on PAGE 5.
009. Be sure you understand instructions on PAGE 5.
010. Proceed to Instruction #2.
011. Be sure you understand instructions on PAGE 5.
012. Be sure you understand instructions on PAGE 5.
013. Be sure you understand instructions on PAGE 5.
014. Be sure you understand instructions on PAGE 5.
015. Be sure you understand instructions on PAGE 5.
016. Be sure you understand instructions on PAGE 5.
017. Be sure you understand instructions on PAGE 5.
018. This is just to practice erasing numbers.
019. Be sure you understand instructions on PAGE 5.
020. Be sure you understand instructions on PAGE 5.
021. Be sure you understand instructions on PAGE 5.
022. Proceed to PAGE 6.
023. Be sure you understand instructions on PAGE 5.
024. Be sure you understand instructions on PAGE 5.
025. Be sure you understand instructions on PAGE 5.
026. Be sure you understand instructions on PAGE 5.
027. Proceed to Instruction #3 on PAGE 5.
028. Be sure you understand instructions on PAGE 5.
029. This is just to practice erasing numbers.
030. Be sure you understand instructions on PAGE 5.
031. This is just to practice erasing numbers.
032. Be sure you understand instructions on PAGE 5.
033. Be sure you understand instructions on PAGE 5.
034. Be sure you understand instructions on PAGE 5.
035. Be sure you understand instructions on PAGE 5.
036. Be sure you understand instructions on PAGE 5.
037. Be sure you understand instructions on PAGE 5.
038. Be sure you understand instructions on PAGE 5.
039. Be sure you understand instructions on PAGE 5.
040. Be sure you understand instructions on PAGE 5.
041. Be sure you understand instructions on PAGE 5.
042. Be sure you understand instructions on PAGE 5.
043. Be sure you understand instructions on PAGE 5.
044. Be sure you understand instructions on PAGE 5.
045. Be sure you understand instructions on PAGE 5.
046. Be sure you understand instructions on PAGE 5.
047. Be sure you understand instructions on PAGE 5.
048. Be sure you understand instructions on PAGE 5.
049. Be sure you understand instructions on PAGE 5.

Answer Sheet. The answer sheet consists of ten columns numbered from 0 to 9. The columns are made up of numbers in numerical order, ranging from 050 to 099 in column 0 to 950 to 999 in Column 9. Each of these numbers corresponds to the item with the same number on the right-hand page of the test booklet. To the right of each of the first four columns on the answer sheet, there is a stripe of erasable ink. Beneath this stripe there is a column of numbers in scrambled order. These concealed numbers correspond to numbered items on the left-hand (even numbered pages) of the test booklet. To obtain information about your patient, you must erase the proper areas in each stripe of the answer page, read the concealed numbers, then read the items with the corresponding numbers on the left-hand pages of the test booklet and be guided by the information you are given.

Exercise 3. The first column, Column 0, is for practice.

Instruction #1. On the answer sheet, in Column 0 please erase Item 050. When you have done so, Item 050 on the answer sheet should look like this:

050 003

Now look at Page 4 (opposite) and follow the instructions given for Item 003.

Instruction #2. If you followed the instructions for Item 003 on page 4, the top of Column 0 of the answer sheet should now look like this:

050	003
051	█
052	
053	
054	
055	
056	010
057	█
058	

Now please practice erasing Items 051, 052, 053, and 054.

Instruction #3. If you have completed Instruction #2, the top of Column 0 should now look like this:

050	003
051	029
052	018
053	031
054	027
055	█
056	010
057	█
058	

Now please erase Item 055 and follow instructions.

Scoring. The parts of this test dealing with history and physical examination have two requirements which must be completed in this order.

FIRST: You must assign a category to each item you erase before you erase it.

SECOND: You must erase the item in the proper column to get the information you need.

You will receive a score (positive or negative) for each numbered item in the test booklet whether you mark it or not. Please do not skip any items but consider each one carefully.

FIRST: All items in history and physical examination fall into one of these three categories:

1. Survey items used for screening, ruling out complications, or adding to useful general information about the patient.
2. Indicated items. These are ones where the collection of information is directly related to the patient's problem as it has presented itself to you. For example, in a patient with a history of hypertensive disease, determining the patient's blood pressure would be clearly an "indicated" item.
3. Useless items. These are items which have no bearing, direct or indirect, on the patient's problem and are considered valueless even for screening or survey purposes.

Go on to PAGE 7.

SECOND: __Assigning Items to Categories:__

1. If you consider that the item you plan to erase is "survey" and is likely to be useful only for screening or for general information or perhaps just to satisfy your curiosity, erase the item in the column marked "survey," like this:

	__S__	__I__
199	143	▬

2. If you consider that the item you plan to erase is "__indicated__" by the nature of the patient's problem as you understand it at the moment, erase the item you want in the "indicated" column, like this:

	__S__	__I__
199	▬	143

3. If you consider the item to be useless but harmless, leave the item as it stands, like this:

	__S__	__I__
199	▬	▬

__Changing Your Mind__.

Once the number on the answer sheet has been erased, it can't be "recovered," so don't try to.

__Instruction__: Proceed to consider all items on PAGES 9 and 11.

__Reminder__: Be sure to consider each item. Remember that __all__ __items__ __are__ __scored__, even the ones you leave unerased (the score may be positive or negative, depending on the item).

INFORMATION

100. Sometimes incontinent
101. Chronic alcoholic
102. Living and well
103. None
104. Has apartment in own house
105. Uses Ex-lax occasionally
106. Always "nervous"
107. College graduate
108. Frequent backache
109. Periods 12x30x5, were prolonged and irregular for 3 years before menopause at 48
110. None
111. No operations
112. Teetotaler, on 1800 cal. diet
113. Wears glasses for reading
114. Asymptomatic
115. Diabetes 10 years' duration; syphilis 15 years ago, adequately treated; breast cancer 8 years ago, treated by surgery
116. Takes 1 gm. Tolbutamide daily
117. Appendectomy at 23, left mastectomy at age 40
118. High school
119. Usual childhood diseases only
120. None
121. Hasn't felt well for years
122. None
123. Has been taking "female hormone" pills for years for "the change"
124. Occasional frequency, no dysuria
125. None
126. Lives with husband 57
127. Has diabetes and high blood pressure
128. No information available
129. All in Europe
130. Had cancer of (?) at age 46, and is separated from spouse
131. Runs boarding house
132. No recent change
133. Spouse died 4 years ago of Tbc.
134. None
135. Gross hematuria (one day episode) 2 months ago
136. Regular and satisfactory (friend rents room from her), but has had postcoital bleeding for 6 weeks
137. Severe
138. Severe shortness of breath and minimal excretion
139. None
140. Sometimes has palpitations
141. Frequent occipital headaches
142. Died of cancer of the womb
143. Eats "what she pleases," mostly carbohydrates
144. Still bleeding
145. Suffers from hemorrhoids
146. None noted
147. Patient refuses to answer
148. You can't get here from there
149. Living and well

MORE HISTORY

You may assume that the Chief Complaint and Present Illness as given are complete and correct. For additional information please select AS MANY of the items below as interest you, erase the code numbers of these items in the proper column of the answer sheet, then find the information with the corresponding code numbers on the opposite page. On the answer sheet, make your erasures in COLUMN 1.

Past Medical History	Illnesses	150
	Injuries	151
	Operations	152
	Pregnancies	153
Family History	Father	154
	Mother	155
	Siblings	156
	Others	157
Social History	Schooling	158
	Occupation	159
	Home Environment	160
	Marital Situation	161
	Sex life	162
	Habits	163
	Drugs and Medicines	164
System Review	General (wgt., fever, weakness, etc.)	165
	HEENT	166
	CVR	167
	GI	168
	GU	169
	GYN	170
	NP	171
	Musculoskeletal	172

Make sure your erasures conform to the following code:

		S	I
Survey or screening item	199	143	▬
Indicated, essential item	199	▬	143
Useless but harmless item	199	▬	▬

When you have completed your work in this section, proceed to PAGE 11.

INFORMATION

200. Not noted
201. All present and equal
202. None palpable
203. 5'0", 190 lbs.
204. Well-formed
205. Not enlarged
206. Not enlarged
207. Fungating exophytic lesion
208. Intact
209. Atrophic
210. Grade II changes, capillary microaneurisms
211. Enlarged to level of umbilicus
212. No abnormalities noted
213. Supple
214. 2 cm. ulcer on posterior wall at hymenal ring
215. 37^{o}, 80, 18, 180/112
216. Obese
217. Not felt
218. Moist
219. Old third degree laceration
220. Normal
221. Not palpable
222. Unremarkable
223. Right normal, papilledema of left disc
224. Undistended
225. Physiologic
226. Old mastectomy scar on left; right negative. No nodes.
227. Well-formed
228. Well-formed
229. Well-developed, obese W. F.
230. Unobstructed
231. Not enlarged
232. Nothing abnormal
233. No abnormalities
234. Atrophic
235. Distended, tympanitic with hyperactive bowel sounds
236. Normal size, no murmurs
237. Within normal limits
238. Tremendously obese with old laparotomy scar
239. Left drum perforated
240. Midline
241. Not noted
242. Intact
243. Moderate enlargement, totally irregular rhythm, no murmurs
244. No abnormalities noted
245. Confirms pelvic findings
246. Atrophic
247. Examination unsatisfactory
248. Pap smear taken, see report
249. Not enlarged, mid-position

GENERAL PHYSICAL EXAMINATION

Please select AS MANY of the items below as you wish to examine. In the proper column of the answer sheet, erase the code numbers of these items, and look up the findings with the corresponding code numbers on the opposite page.

On the answer sheet, make your erasures in COLUMN 2.

TPR, BP	250
Hgt., wgt.	251
General description	252
Skin	253
Lymphatics	254
Head and face	255
Hair	256
Eyes	257
Ears	258
Nose	259
Mouth, teeth, throat	260
Neck	261
Trachea	262
Thyroid	263
Vessels	264
Chest	265
Breasts and axillae	266
Heart	267
Lungs	268
Abdomen	269
Liver, spleen, kidneys	270
Masses	271
Tenderness	272
Pelvic examination	273
Hair distribution	274
Ext. genitalia	275
SUB glands	276
Introitus and perineum	277
Vagina	278
Cervix	279
Uterus	280
Adnexa	281
Rectal	282
Sphincter	283
Masses	284
Back	285
Extremities	286
Pulses	287
Deep tendon reflexes	288
Neurological	289

Make sure your erasures conform to the following code:

		S	I
Survey or screening item	199	143	■
Indicated, essential item	199	■	143
Useless, but harmless item	199	■	■

After you have completed your work in this section, proceed to PAGE 12.

INSTRUCTIONS FOR DIAGNOSTIC TESTS AND PROCEDURES

Scoring. The part of this test dealing with diagnostic tests and procedures is similar to the part dealing with history and physical examination, but has an additional requirement.

> You must erase the proper items in the proper category to get the information you need.

You will receive a score (positive or negative) for each numbered item in this part of the test whether you erase it or not. Please do not skip any items but consider each one carefully.

FIRST. All items fall into one of four categories:

1. Survey Items. These are items used for screening or survey or for ruling out complications, not directly related to the patient's primary illness.
2. Indicated Items. These are ones where the collection of information from diagnostic tests or procedures is directly related to the patient's problem as it has presented itself to you.
3. Useless Items. These are diagnostic tests and procedures which have no bearing, direct or indirect, on the patient's problem but are essentially harmless. They may, however, cost the patient time, money, and minor discomfort or anxiety.
4. Contraindicated Items. These are tests or procedures which subject the patient to unnecessary and unjustifiable risks, anxiety, pain, or discomfort.

Go on to PAGE 13.

SECOND.

1. If you consider that the item you plan to erase is "survey" and is useful for only screening or for general information, or perhaps just to satisfy your curiosity, erase the item in the column marked "survey," like this:

C S I

399 ▬ 319 ▬

2. If you consider that the item you plan to erase is clearly indicated by the nature of the patient's problem as you understand it at the moment, erase the item in the indicated colum, like this:

C S I

399 ▬ ▬ 319

3. If you consider the item to be useless but harmless, leave the item as it stands, like this:

C S I

399 ▬ ▬ ▬

4. If you consider the item to be "contraindicated," harmful, and not in the patient's interest, erase the item in the "contraindicated" column, like this: NO NUMBER WILL APPEAR

C S I

399 ▭ ▬ ▬

Instructions: Proceed to consider all items on PAGE 15.

Reminder: Be sure to consider each item. Remember that all items are scored, even the ones you leave unerased.

INFORMATION

300. Negative
301. Not indicated
302. Negative
303. Non-reactive
304. Negative
305. Negative
306. Negative
307. Squamous cell carcinoma, invasive
308. Left ventricular hypertrophy
309. No abnormalities
310. Na 140, K 3.8, Cl 98, CO_2 25
311. Class I, atrophic smear
312. Report not available
313. Negative
314. Class II, estrogen effect
315. Class IV (positive) malignant cells present
316. No abnormalities
317. F 100, 1 hr. 220, 2 hr. 190, 3 hr. 140
318. Hct. 36, WBC 8,000, differential normal
319. Marked cardiac enlargement with hypertensive contour. Left breast shadow absent.
320. Less than 6% retention at 45 minutes
321. No evidence of extension beyond the uterus, no enlarged lymph nodes or signs of peritoneal spread.
322. 180 mg%
323. Aortic lymph nodes are enlarged, and on biopsy and frozen section they show adenocarcinoma. Metastases to liver are also palpable. No evidence of peritoneal spread.
324. Specific gravity 1.010, pH 5.8, glucose 2+, acetone negative, albumin positive, microscopic: occasional WBC
325. Chronic cervicitis with squamous metaplasia
326. Reactive, titer 1:64
327. Report not available
328. Chronic cervicitis with squamous metaplasia
329. O, Rh positive
330. Negative
331. 4 K-A units/100 ml.
332. Negative
333. Negative
334. Findings: same as noted elsewhere
335. Patient dies on operating table of pulmonary edema
336. Negative film. Heart normal size.
337. Endocervical tissue
338. F 80, 1 hr. 110, 2 hr. 68, 3 hr. 80
339. 10 mg%
340. Negative
341. Positive
342. Chronic cervicitis
343. Na 120, K 5.1, Cl 86, CO_2 11 (mEq/L)
344. Negative
345. Scattered spherical ("snowball") densities in both lung fields, minimal cardiac enlargement
346. Negative
347. Hematocrit 23, WBC 6,000, hypochromic, microcytic anemia
348. 40% excretion in 15 minutes
349. Adenoacanthoma

DIAGNOSTIC STUDIES AND PROCEDURES

Please select AS MANY of the items below as you wish to examine. In the proper column of the answer sheet, erase the code numbers of these items, and look up the findings with the corresponding code numbers on the opposite page.

On the answer sheet, make your erasures in COLUMN 3.

Chemistries (blood, serum)	Alk. phosphatase	350
	Bilirubin, direct, indirect	351
	Glucose, 2 hr. postprandial	352
	Electrolytes, Na, K, Cl, CO_2	353
	Urea Nitrogen (BUN)	354
Clinical & cytopathology serology	Stool for blood, OCP	355
	Cervico Vaginal Pap smear	356
	VDRL	357
Hematology	Blood group, and Rh	358
	CBC	359
Urine tests	Urinalysis, complete	360
X-rays	Abdomen	361
	Barium enema	362
	Chest	363
	Cholecystogram	364
	GI series	365
	Pelvis	366
	Pyelogram (IVP)	367
	Skull	368
	Spine	369
Procedures	BSP	370
	Cystoscopy	371
	Darkfield exam for T. Pallidum	372
	Electrocardiogram	373
	Examination under anesthesia	374
	Frei test	375
	Glucose tolerance test	376
	PPD or Tuberculin test	377
	Proctosigmoidoscopy	378
	PSP	379
	Smears for Donovan bodies	380
	Smears for H. Ducreyi	381
Diagnostic Surgery	Biopsy cervix (punch)	382
	Biopsy vagina	383
	Conization of cervix	384
	D & C, endocervix	385
	D & C, endometrium	386
	Exploratory laparotomy	387

Make sure that all your erasures conform to the following code:

		C	S	I
Survey or screening item	199	■	143	■
Indicated, essential item	199	■	■	143
Useless but harmless item	199	■	■	■
Contraindicated, harmful item	199	▭	■	■

After you have completed your work in this section, proceed to PAGE 16.

PART II

YOUR DIAGNOSIS

DESCRIPTION OF PART II

The test booklet. This section of the test consists of lists of primary and secondary diagnoses which you are asked to divide into three categories:

1. Diagnoses which have been excluded by your history, physical exam, or diagnostic tests and procedures.
2. Diagnoses which were not excluded by your history, physical exam, or diagnostic tests and procedures.
3. Diagnoses which were established or rated most likely by your history, physical examination and/or diagnostic tests and procedures.

The answer sheet. Column 4 of the answer sheet consists of a column of numbers corresponding to the code numbers of the listed diagnoses. The column of numbers is followed by two columns of spaces in which you are to erase your answers as follows:

1. Column 4 EXCLUDED is for diagnoses you have excluded.
2. Column 4 NOT EXCLUDED is for diagnoses you have not excluded.

Instructions for PAGE 17.

FIRST: From the list on the opposite page, select all the diagnoses which your workup of history and/or physical examination and/or diagnostic studies and procedures has permitted you to exclude from further consideration. Erase each of these in the Column 4 EXCLUDED of the answer sheet, at its proper number.

SECOND: From the list on the opposite page, select all the diagnoses which you were unable to exclude by the choices of items of history, physical examination, and diagnostic tests and procedures which were available to you. Erase each of these in Column 4 NOT EXCLUDED of the answer sheet, at its corresponding number.

LIST OF DIAGNOSES
COLUMN 4

Adenoacanthoma, primary, of the endometrium	450
Adenocarcinoma, primary, of cervix	455
Adenocarcinoma, primary of endometrium	461
Adenocarcinoma, primary of vagina	466
Adenocarcinoma, metastatic from primary in breast	471
Adenocarcinoma, metastatic from primary in colon	476
Adenocarcinoma, metastatic from primary in ovary	481
Carcinoma, squamous cell, of cervix	485
Chancroid	491
Diabetes mellitus	492
Exogenous obesity	493
Granuloma inguinale	494
Hypertensive vascular disease	495
Lymphopathia venereum	496
Pulmonary tuberculosis, active	497
Pulmonary tuberculosis, inactive	498
Positive serology	499

Instructions: When you have completed this page, proceed to PAGE 18.

INSTRUCTIONS FOR PAGE 19

From your choice of the diagnoses which were not excluded by your workup, please indicate in the list on PAGE 19 the diagnoses which are definitely established or, of the choices given, most likely. Among competing or conflicting diagnoses, there can be only ONE which is most likely. The patient may, however, have a number of unrelated conditions in addition. Erase each of your selections in COLUMN 5 ESTABLISHED of the answer sheet, at its proper number.

ESTABLISHED OR MOST LIKELY DIAGNOSES
COLUMN 5

Adenoacanthoma, primary, of endometrium (stage unspecified)		550
	Stage I	551
(specify stage if you can)	Stage II	552
	Stage III	553
	Stage IV	554
Adenocarcinoma, primary of cervix (stage unspecified)		555
	Stage 0	556
	Stage I	557
(specify stage if you can)	Stage II	558
	Stage III	559
	Stage IV	560
Adenocarcinoma, primary, of endometrium (stage unspecified)		561
	Stage I	562
(specify stage if you can)	Stage II	563
	Stage III	564
	Stage IV	565
Adenocarcinoma, primary of vagina (stage unspecified)		566
	Stage I	567
(specify stage if you can)	Stage II	568
	Stage III	569
	Stage IV	570
Adenocarcinoma, metastatic from primary in breast		571
	With spread to cervix	572
(specify spread if appropriate)	With spread to lungs	573
	With spread to ovaries	574
	With spread to vagina	575
Adenocarcinoma, metastatic from primary in colon		576
	With spread to cervix	577
(specify spread if appropriate)	With spread to lungs	578
	With spread to ovaries	579
	With spread to vagina	580
Adenocarcinoma, metastatic from primary in ovary		581
	With spread to cervix	582
(specify spread if appropriate)	With spread to lungs	583
	With spread to vagina	584
Carcinoma, squamous cell of cervix (stage unspecified)		585
	Stage 0	586
(specify stage if you can)	Stage I	587
	Stage II	588
	Stage III	589
	Stage IV	590
Chancroid		591
Diabetes mellitus		592
Exogenous obesity		593
Granuloma inguinale		594
Hypertensive vascular disease		595
Lymphopathia venereum		596
Pulmonary tuberculosis, active		597
Pulmonary tuberculosis, inactive		598
Positive serology		599

Instructions: When you have completed this and all preceding pages in Part II, proceed to PART III on PAGE 20.

PART III

YOUR PLAN OF TREATMENT

DESCRIPTION OF PART III

On the basis of the information which has been made available to you, you should not only be able to define your patient's problems, you should also be able to outline a plan of managing this patient's major illness. This part of the test is divided into two sections.

1. Selection and sequencing of methods of therapy.	PAGE 21
2. Detailed treatments within each method of therapy.	PAGE 23

Instructions for PAGE 21.

The opposite page offers a list of three methods of therapy in every possible combination and sequence. Please make ONE selection and record it in Column 6 of the answer sheet by erasing the overlay next to the appropriate code number.

SELECTION AND SEQUENCING OF METHODS OF THERAPY

COLUMN 6

Make one choice in COLUMN 6.

TREATMENT	
Hormonal therapy only	650
Radiation therapy only	651
Surgical therapy only	652
Hormonal therapy followed by radiation therapy	653
Hormonal therapy followed by surgical therapy	654
Radiation therapy followed by hormonal therapy	655
Radiation therapy followed by surgical therapy	656
Surgical therapy followed by hormonal therapy	657
Surgical therapy followed by radiation therapy	658
Hormonal, then radiation, then surgical therapy	659
Hormonal, then surgical, then radiation therapy	660
Radiation, then hormonal, then surgical therapy	661
Radiation, then surgical, then hormonal therapy	662
Surgical, then hormonal, then radiation therapy	663
Surgical, then radiation, then hormonal therapy	664
None of those listed	665

Erase your ONE choice, then proceed to PAGE 22.

INSTRUCTIONS FOR PAGE 23

Prerequisite.

Use the opposite page only after you have selected your sequence of treatment on PAGE 21 and recorded your choice in Column 6 of the answer sheet.

On the opposite page, select AS MANY items as you wish, but keep in mind that your choice must be related to the sequence of treatment you have previously chosen. Erase all of your choices on the answer sheet in Column 7.

Note: Columns 8 and 9 on the answer sheet are not used in this test.

DETAILED TREATMENTS
COLUMN 7

HORMONAL TREATMENT			
	Androgen therapy		750
	Estrogen therapy		751
(specify therapy)	Progestational therapy		752
	Continuous estrogen-progestin therapy		753
	Cyclic estrogen-progestin therapy		754
RADIATION TREATMENT			
A. External (specify source)	Conventional x-ray		760
	Supervoltage or telecobalt		761
(specify targets)	Cancericidal dosage (>5,000r):	lung fields	762
		upper abdomen	763
		entire abdomen	764
		pelvic cavity	765
	Castrating dosage (<2,500r):	ovaries	766
B. Internal (specify source)	Vaginal ovoids		770
(radium)	Uterine tandem		771
	Heyman's capsules		772
(specify dosages)	Dose at vaginal mucosa	2,000-3,000 r	773
	(from vaginal ovoids	5,000-6,000 r	774
		10,000-12,000 r	775
	Dose at uterine surface	2,000-3,000 r	776
	(from Heyman's capsules	5,000-6,000 r	777
	or tandem)	10,000-12,000 r	778
	Dose at Point A	2,000-5,000 r	779
	(from tandem, ovoids, and	7,500 r	780
	external sources)	15,000 r	781
	Dose at Point B	5,000 r	782
	(from all sources)	10,000 r	783
SURGICAL TREATMENT	(For Laparotomy findings, see DIAGNOSTIC PROCEDURES on PAGE 15)		
	Exenteration of pelvis, anterior		785
	Exenteration of pelvis, posterior		786
	Exenteration of pelvis, total		787
(specify procedures)	Radical hysterectomy		788
	Subtotal hysterectomy		789
	Total hysterectomy		790
	Omentectomy		791
	Pelvic lymph node dissection		792
	Salpingo-oophorectomy, bilateral		793
	Salpingo-oophorectomy, unilateral		794

When you have finished this and all preceding pages, you have completed this test.

APPENDIX H

SAMPLE ANSWER SHEET (1967)

H - 1 Covered May, 1967

H - 2 Uncovered May, 1967

Column 0	Column 1 History	SURVEY ITEM	INDICATED ITEM	Column 2 Physical	SURVEY ITEM	INDICATED ITEM	Column 3 Tests and Procedures	CONTRA-INDICATED	SURVEY ITEM	INDICATED ITEM	Column 4 Diagnoses	EXCLUDED	NOT EXCLUDED	Column 5	ESTABLISHED OR MOST LIKELY DX	Column 6	Column 7	Column 8	Column 9
050	150			250			350				450			550		650	750	850	950
051	151			251			351				451			551		651	751	851	951
052	152			252			352				452			552		652	752	852	952
053	153			253			353				453			553		653	753	853	953
054	154			254			354				454			554		654	754	854	954
055	155			255			355				455			555		655	755	855	955
056	156			256			356				456			556		656	756	856	956
057	157			257			357				457			557		657	757	857	957
058	158			258			358				458			558		658	758	858	958
059	159			259			359				459			559		659	759	859	959
060	160			260			360				460			560		660	760	860	960
061	161			261			361				461			561		661	761	861	961
062	162			262			362				462			562		662	762	862	962
063	163			263			363				463			563		663	763	863	963
064	164			264			364				464			564		664	764	864	964
065	165			265			365				465			565		665	765	865	965
066	166			266			366				466			566		666	766	866	966
067	167			267			367				467			567		667	767	867	967
068	168			268			368				468			568		668	768	868	968
069	169			269			369				469			569		669	769	869	969
070	170			270			370				470			570		670	770	870	970
071	171			271			371				471			571		671	771	871	971
072	172			272			372				472			572		672	772	872	972
073	173			273			373				473			573		673	773	873	973
074	174			274			374				474			574		674	774	874	974
075	175			275			375				475			575		675	775	875	975
076	176			276			376				476			576		676	776	876	976
077	177			277			377				477			577		677	777	877	977
078	178			278			378				478			578		678	778	878	978
079	179			279			379				479			579		679	779	879	979
080	180			280			380				480			580		680	780	880	980
081	181			281			381				481			581		681	781	881	981
082	182			282			382				482			582		682	782	882	982
083	183			283			383				483			583		683	783	883	983
084	184			284			384				484			584		684	784	884	984
085	185			285			385				485			585		685	785	885	985
086	186			286			386				486			586		686	786	886	986
087	187			287			387				487			587		687	787	887	987
088	188			288			388				488			588		688	788	888	988
089	189			289			389				489			589		689	789	889	989
090	190			290			390				490			590		690	790	890	990
091	191			291			391				491			591		691	791	891	991
092	192			292			392				492			592		692	792	892	992
093	193			293			393				493			593		693	793	893	993
094	194			294			394				494			594		694	794	894	994
095	195			295			395				495			595		695	795	895	995
096	196			296			396				496			596		696	796	896	996
097	197			297			397				497			597		697	797	897	997
098	198			298			398				498			598		698	798	898	998
099	199			299			399				499			599		699	799	899	999

C igh , Med Co ge o org , May 67

ANSWER SHEET - A

Name ____
Last First Middle

Pledge (Signature)_________________________________ Date ____________________

Column 0		Column 1 History			Column 2 Physical			Column 3 Tests and Procedures				Column 4 Diagnoses			Column 5		Column 6		Column 7		Column 8		Column 9	
			SURVEY ITEM	INDICATED ITEM		SURVEY ITEM	INDICATED ITEM		CONTRA-INDICATED	SURVEY ITEM	INDICATED ITEM		EXCLUDED	NOT EXCLUDED		ESTABLISHED OR MOST LIKELY DX								
050	003	150	127	127	250	215	215	350	===	331	331	450	===	===	550	===	650	===	750	===	850	===	950	922
051	029	151	122	122	251	203	203	351	===	327	327	451	===	===	551	===	651	===	751	===	851	===	951	910
052	018	152	110	110	252	229	229	352	===	322	322	452	===	===	552	===	652	===	752	===	852	===	952	939
053	031	153	139	139	253	218	218	353	===	310	310	453	===	===	553	===	653	===	753	===	853	===	953	930
054	027	154	130	130	254	231	231	354	===	339	339	454	===	===	554	===	654	===	754	===	854	===	954	915
055	022	155	115	115	255	227	227	355	===	330	330	455	===	===	555	===	655	===	755	===	855	===	955	903
056	010	156	103	103	256	222	222	356	===	315	315	456	===	===	556	===	656	===	756	===	856	===	956	929
057	039	157	129	129	257	210	210	357	===	303	303	457	===	===	557	===	657	===	757	===	857	===	957	918
058	030	158	118	118	258	239	239	358	===	329	329	458	===	===	558	===	658	===	758	===	858	===	958	931
059	015	159	131	131	259	230	230	359	===	318	318	459	===	===	559	===	659	===	759	===	859	===	959	927
060	013	160	104	104	260	232	232	360	===	324	324	460	===	===	560	===	660	===	760	===	860	===	960	933
061	040	161	133	133	261	213	213	361	===	304	304	461	===	===	561	===	661	===	761	===	861	===	961	936
062	005	162	136	136	262	240	240	362	===	333	333	462	===	===	562	===	662	===	762	===	862	===	962	912
063	024	163	112	112	263	205	205	363	===	336	336	463	===	===	563	===	663	===	763	===	863	===	963	916
064	004	164	116	116	264	224	224	364	===	312	312	464	===	===	564	===	664	===	764	===	864	===	964	932
065	033	165	132	132	265	204	204	365	===	316	316	465	===	===	565	===	665	===	765	===	865	===	965	913
066	036	166	113	113	266	233	233	366	===	332	332	466	===	===	566	===	666	===	766	===	866	===	966	940
067	012	167	140	140	267	236	236	367	===	313	313	467	===	===	567	===	667	===	767	===	867	===	967	905
068	016	168	105	105	268	212	212	368	===	340	340	468	===	===	568	===	668	===	768	===	868	===	968	924
069	032	169	124	124	269	216	216	369	===	305	305	469	===	===	569	===	669	===	769	===	869	===	969	904
070	041	170	109	109	270	217	217	370	===	320	320	470	===	===	570	===	670	===	770	===	870	===	970	906
071	050	171	106	106	271	241	241	371	===	309	309	471	===	===	571	===	671	===	771	===	871	===	971	908
072	048	172	108	108	272	200	200	372	===	306	306	472	===	===	572	===	672	===	772	===	872	===	972	934
073	020	173	134	134	273	248	248	373	===	308	308	473	===	===	573	===	673	===	773	===	873	===	973	946
074	009	174	146	146	274	220	220	374	===	334	334	474	===	===	574	===	674	===	774	===	874	===	974	917
075	006	175	117	117	275	209	209	375	===	346	346	475	===	===	575	===	675	===	775	===	875	===	975	941
076	008	176	141	141	276	206	206	376	===	317	317	476	===	===	576	===	676	===	776	===	876	===	976	950
077	034	177	100	100	277	208	208	377	===	341	341	477	===	===	577	===	677	===	777	===	877	===	977	948
078	046	178	148	148	278	234	234	378	===	300	300	478	===	===	578	===	678	===	778	===	878	===	978	920
079	017	179	120	120	279	246	246	379	===	348	348	479	===	===	579	===	679	===	779	===	879	===	979	909
080	021	180	144	144	280	249	249	380	===	302	302	480	===	===	580	===	680	===	780	===	880	===	980	928
081	045	181	128	128	281	221	221	381	===	344	344	481	===	===	581	===	681	===	781	===	881	===	981	901
082	042	182	101	101	282	245	245	382	===	328	328	482	===	===	582	===	682	===	782	===	882	===	982	925
083	002	183	125	125	283	242	242	383	===	301	301	483	===	===	583	===	683	===	783	===	883	===	983	937
084	044	184	137	137	284	202	202	384	===	325	325	484	===	===	584	===	684	===	784	===	884	===	984	949
085	028	185	149	149	285	244	244	385	===	337	337	485	===	===	585	===	685	===	785	===	885	===	985	921
086	001	186	121	121	286	228	228	386	===	349	349	486	===	===	586	===	686	===	786	===	886	===	986	945
087	025	187	145	145	287	201	201	387	===	321	321	487	===	===	587	===	687	===	787	===	887	===	987	942
088	037	188	142	142	288	225	225	388	===	345	345	488	===	===	588	===	688	===	788	===	888	===	988	902
089	049	189	102	102	289	237	237	389	===	342	342	489	===	===	589	===	689	===	789	===	889	===	989	944
090	047	190	114	114	290	235	235	390	===	343	343	490	===	===	590	===	690	===	790	===	890	===	990	926
091	007	191	126	126	291	247	247	391	===	314	314	491	===	===	591	===	691	===	791	===	891	===	991	938
092	019	192	138	138	292	207	207	392	===	326	326	492	===	===	592	===	692	===	792	===	892	===	992	911
093	043	193	111	111	293	219	219	393	===	338	338	493	===	===	593	===	693	===	793	===	893	===	993	923
094	014	194	123	123	294	243	243	394	===	311	311	494	===	===	594	===	694	===	794	===	894	===	994	935
095	026	195	135	135	295	214	214	395	===	323	323	495	===	===	595	===	695	===	795	===	895	===	995	947
096	038	196	147	147	296	226	226	396	===	335	335	496	===	===	596	===	696	===	796	===	896	===	996	907
097	011	197	107	107	297	238	238	397	===	347	347	497	===	===	597	===	697	===	797	===	897	===	997	919
098	023	198	119	119	298	211	211	398	===	307	307	498	===	===	598	===	698	===	798	===	898	===	998	943
099	035	199	143	143	299	223	223	399	===	319	319	499	===	===	599	===	699	===	799	===	899	===	999	914

ANSWER SHEET - A

Name ____
Last First Middle

Pledge (Signature)_______________________________ Date ____________________

APPENDIX I

TEST DECODED INTO TUBBING INFORMATION

FOR

PAGE

I - 1 Diagnostic Product, Test A 179
I - 2 Therapeutic Product, Test A 183

I - 3 Diagnostic Product, Test A' 185
I - 4 Therapeutic Product, Test A' 189

I - 5 Diagnostic Product, Test A 191
I - 6 Therapeutic Product, Test A 195

APPENDIX I-1 DIAGNOSTIC PRODUCT, TEST A

CASE PRESENTATION

A fifty year old woman comes to your office with a complaint of intermittent vaginal bleeding of six weeks' duration. She adds that this is the first vaginal bleeding she has noted since her menopause two years ago at age 48.

Test A - MORE HISTORY

PAST MEDICAL HISTORY

Illnesses - Diabetes 10 years duration; syphilis 15 years ago, adequately treated. Breast cancer 3 years ago, treated by surgery.
Injuries - None
Operations - Appendectomy at 23, left mastectomy at age 47
Pregnancies - None

FAMILY HISTORY

Father - Has diabetes and high blood pressure
Mother - Had cancer of (?) at age 46. She and husband are separated.
Siblings - None
Others - All in Europe

SOCIAL HISTORY

Schooling - High School
Occupation - Runs boarding house
Home environment - Has apartment in own house
Marital situation - Spouse died 4 years ago of TB
Sex life - Regular and satisfactory (friend rents room from her) but has had postcoital bleeding for 6 weeks.
Habits - Teetotaler, on 1800 cal. diet
Drugs and medicines - Takes 1 gm. Tolbutamide daily

SYSTEM REVIEW

General (wgt., fever, weakness, etc.) - No recent change
HEENT - Wears glasses for reading
CVR - Sometimes has palpitations
GI - Uses Ex-lax occasionally
GU - Occasional frequency, no dysuria
GYN - Periods 12x30x5, were prolonged and irregular for 3 years before menopause at 48.
NP - Always "nervous."
Musculoskeletal - Frequent backaches

0125 Test A - GENERAL PHYSICAL EXAMINATION

- TPR, BP - 37°, 80, 18, 180/112
- Hgt., wgt. - 5'6", 170 lbs.
- General description - Well-developed, W.F.
- Skin - Moist
- Lymphatics - Not enlarged
- Head and face - Well-formed
  - Hair - Unremarkable
  - Eyes - Grade II changes, capillary microaneurisms
  - Ears - Left drum perforated
  - Nose - Unobstructed
  - Mouth, teeth, throat - Nothing abnormal
- Neck - Supple
  - Trachea - Midline
  - Thyroid - Not enlarged
  - Vessels - Undistended
- Chest - Well-formed, left mastectomy scar
  - Breasts and axillae - Old mastectomy scar on left; right negative. No nodes.
  - Heart - Normal size, no murmurs
  - Lungs - No abnormalities noted
- Abdomen - Obese
  - Liver, spleen, kidneys - Not felt
  - Masses - Not noted
  - Tenderness - Not noted
- Pelvic examination - Pap smear taken, see report
  - Hair distribution - Normal
  - Ext. genitalia - Atrophic
  - SUB glands - Not enlarged
  - Introitus and perineum - Intact
  - Vagina - 1 cm. ulcer on left lateral wall
  - Cervix - Atrophic
  - Uterus - Not enlarged, mid-position
  - Adnexa - Not palpable
- Rectal - Confirms pelvic findings
  - Sphincter - Intact
  - Masses - None palpable
- Back - No abnormalities noted
- Extremities - Well-formed
- Pulses - All present and equal
- Deep tendon reflexes - Physiologic
- Neurological - Within normal limits

0126 Test A - DIAGNOSTIC STUDIES AND PROCEDURES

CHEMISTRIES (blood, serum)

Alk. phosphatase - 4 K-A units/100 ml.
Bilirubin, direct, indirect - Report not available
Glucose, 2 hr. postprandial - 180 mg%
Electrolytes, Na, K, Cl, CO_2 - Na 140, K 3.8, Cl 98, CO_2 25
Urea nitrogen (BUN) - 10 mgm%

CLINICAL AND CYTOPATHOLOGY

Stool for blood, OCP - Negative
Cervico-vaginal Pap smear - Class II, estrogen effect

SEROLOGY

VDRL - Non-reactive

HEMATOLOGY

Blood group, and Rh - 0, Rh positive
CBC - Hct. 36, WBC 8,000, differential normal

URINE TESTS

Urinalysis, complete - Specific gravity 1.010, pH 5.8, glucose 2+, acetone negative, albumin positive, microscopic: occasional WBC

X-RAYS

Abdomen - Negative
Barium enema - Negative
Chest - Scattered spherical ("snowball") densities in both lung fields, minimal cardiac enlargement.
Cholecystogram - Report not available
GI series - No abnormalities
Pelvis - Negative
Pyelogram (IVP) - Negative
Skull - Negative
Spine - Negative

PROCEDURES

BSP - Less than 6% retention at 45 minutes
Cystoscopy - No abnormalities
Darkfield exam for T. Pallidum - Negative
Electrocardiogram - Left ventricular hypertrophy
Examination under anesthesia - Findings: same as noted elsewhere
Frei test - Negative
Glucose tolerance test - F 100, 1 hr. 220, 2 hr. 190, 3 hr. 140
PPD or Tuberculin test - Positive
Proctosigmoidoscopy - Negative
PSP - 40% excretion in 15 minutes
Smears for Donovan bodies - Negative
Smears for H. Ducreyi - Negative

DIAGNOSTIC SURGERY

Biopsy cervix (punch) - Chronic cervicitis
Biopsy vagina - Adenocarcinoma, medullary type
Conization of cervix - Chronic cervicitis with squamous metaplasia
D & C, endocervix - Endocervical tissue
D & C, endometrium - Estrogenic hyperplasia
Exploratory laparotomy - Aortic lymph nodes are enlarged, and on biopsy and frozen section they show adenocarcinoma. Metastases to liver are also palpable. No evidence of peritoneal spread.

APPENDIX I-2 THERAPEUTIC PRODUCT, TEST A

Fifty year old obese, hypertensive, diabetic woman two years postmenopausal with vaginal bleeding. Radical mastectomy three years ago for adenocarcinoma of breast. X-ray shows pulmonary metastases. D & C shows estrogenic hyperplasia of endometrium. Biopsy of vaginal ulcer shows adenocarcinoma. Most likely or established diagnoses upon which treatment should be based:

Adenocarcinoma, metastatic from primary in breast	751
With spread to lungs	573
With spread to vagina	575
Diabetes mellitus	592
Exogenous obesity	593
Pulmonary tuberculosis, inactive	598

Pulmonary tuberculosis, inactive 598

Radiation treatment note: Cancericidal dosages (> 5000 r) to entire or upper abdomen or to lung fields are likely to be lethal because of destruction of renal pulmonary parenchyma.

APPENDIX I-3 DIAGNOSIS PRODUCT, TEST A'

CASE PRESENTATION

A fifty year old woman comes to your office with a complaint of intermittent vaginal bleeding of six weeks' duration. She adds that this is the first vaginal bleeding she has noted since her menopause two years ago at age 48.

Test A' - MORE HISTORY

PAST MEDICAL HISTORY

Illnesses - Has diabetes and high blood pressure
Injuries - None
Operations - None
Pregnancies - None

FAMILY HISTORY

Father - Had cancer of (?) at age 46, and is separated from spouse
Mother - Diabetes 10 years duration; syphilis 15 years ago, adequately treated.
Breast cancer 8 years ago, treated by surgery.
Siblings - None
Others - All in Europe

SOCIAL HISTORY

Schooling - High school
Occupation - Runs boarding house
Home environment - Has apartment in own house
Marital situation - Spouse died 4 years ago of TB
Sex life - Regular and satisfactory (friend rents room from her) but has had postcoital bleeding for 6 weeks.
Habits - Teetotaler, on 1800 cal. diet
Drugs and medicines - Takes 1 gm. Tolbutamide daily

SYSTEM REVIEW

SYSTEM REVIEW

General (wgt., fever, weakness, etc.) - No recent change
HEENT - Wears glasses for reading
CVR - Sometimes has palpitations
GI - Uses Ex-lax occasionally
GU - Occasional frequency, no dysuria
GYN - Periods 12x30x5, were prolonged and irregular for 3 years before menopause at 48.
NP - Always "nervous."
Musculoskeletal - Frequent backache

0110

Test A' - GENERAL PHYSICAL EXAMINATION

TPR, BP - 37°, 80, 18, 180/112
Hgt., wgt. - 5'0", 190 lbs.
General description - Well-developed, obese W.F.
Skin - Moist
Lymphatics - Not enlarged
Head and Face - Well-formed
- Hair - Unremarkable
- Eyes - Grade II changes, capillary microaneurisms
- Ears - Left drum perforated
- Nose - Unobstructed
- Mouth, teeth, throat - Nothing abnormal

Neck - Supple
- Trachea - Midline
- Thyroid - Not enlarged
- Vessels - Undistended

Chest - Well-formed
- Breasts and axillae - No abnormalities
- Heart - Normal size, no murmurs
- Lungs - No abnormalities noted

Abdomen - Obese
- Liver, spleen, kidneys - Not felt
- Masses - Not noted
- Tenderness - Not noted

Pelvic examination - Pap smear taken, see report.
- Hair distribution - Normal
- Ext. genitalia - Atrophic
- SUB glands - Not enlarged
- Introitus and perineum - Intact
- Vagina - Atrophic
- Uterus - Not enlarged, mid-position
- Cervix - Atrophic
- Adnexa - Not palpable

Rectal - Confirms pelvic findings
- Sphincter - Intact
- Masses - None palpable

Back - No abnormalities noted
Extremities - Well-formed
Pulses - All present and equal
Deep tendon reflexes - Physiologic
Neurological - Within normal limits

0114 Test A' - DIAGNOSTIC STUDIES AND PROCEDURES

CHEMISTRIES (blood, serum)
Alk. phosphatase - 4 K-A units/100 ml.
Bilirubin, direct, indirect - Report not available
Glucose, 2 hr. postprandial - 180 mg%
Electrolytes, Na, K, Cl, CO_2 - Na 140, K 3.8, Cl 98, CO_2 25
Urea nitrogen (BUN) - 10 mgm%

CLINICAL AND CYTOPATHOLOGY
Stool for blood, OCP - Negative
Cervico-vaginal pap smear - Class IV (positive) malignant cells present

SEROLOGY
VDRL - Non-reactive

HEMATOLOGY
Blood group, and Rh - 0, Rh positive
CBC - Hct. 36, WBC 8,000, differential normal

URINE TESTS
Urinalysis, complete - Specific gravity 1.010, pH 5.8, glucose 2+, acetone negative, albumin positive, microscopic: occasional WBC

X-RAYS
Abdomen - Negative
Barium enema - Negative
Chest - Negative film; heart normal size
Cholecystogram - Report not available
GI series - No abnormalities
Pelvis - Negative
Pyelogram (IVP) - Negative
Skull - Negative
Spine - Negative

PROCEDURES
BSP - Less than 6% retention at 45 minutes
Cystoscopy - No abnormalities
Darkfield exam for T. Pallidum - Negative
Electrocardiogram - Left ventricular hypertrophy
Examination under anesthesia - Findings: same as noted elsewhere
Frei test - Negative
Glucose tolerance test - F 100, 1 hr. 220, 2 hr. 190, 3 hr. 140
PPD or Tuberculin test - Positive
Proctosigmoidoscopy - Negative
PSP - 40% excretion in 15 minutes
Smears for Donovan bodies - Negative
Smears for H. Ducreyi - Negative

DIAGNOSTIC SURGERY
Biopsy cervix (punch) - Adenocarcinoma
Biopsy vagina - Not indicated
Conization of cervix - Adenocarcinoma
D & C, endocervix - Adenocarcinoma
D & C, endometrium - Estrogenic hyperplasia
Exploratory laparotomy - No evidence of extension beyond the uterus, no enlarged lymph nodes or signs of peritoneal spread.

APPENDIX I - 4 THERAPEUTIC PRODUCT

TEST A'

Fifty year old obese, hypertensive, diabetic woman two years postmenopausal with vaginal bleeding. Physical examination and diagnostic workup is entirely negative, except fractional D & C which shows adenocarcinoma of endocervix with estrogenic hyperplasia of endometrium. Established diagnoses upon which treatment should be based:

Adenocarcinoma, primary of cervix, Stage I	557
Diabetes mellitus	592
Exogenous obesity	593
Pulmonary tuberculosis, inactive	598

APPENDIX I - 5 DIAGNOSTIC PRODUCT, TEST A

CASE PRESENTATION

A fifty year old woman comes to your office with a complaint of intermittent vaginal bleeding of six weeks' duration. She adds that this is the first vaginal bleeding she has noted since her menopause two years ago at age 48.

0108

Test A - MORE HISTORY

PAST MEDICAL HISTORY

Illnesses - Has diabetes and high blood pressure
Injuries - None
Operations - None
Pregnancies - None

FAMILY HISTORY

Father - Had cancer of (?) at age 46, and is separated from spouse
Mother - Diabetes 10 years duration; syphilis 15 years ago, adequately treated. Breast cancer 8 years ago, treated by surgery.
Siblings - None
Others - All in Europe

SOCIAL HISTORY

Schooling - High school
Occupation - Runs boarding house
Home environment - Has apartment in own house
Marital situation - Spouse died four years ago with TB
Sex life - Regular and satisfactory (friend rents room from her) but has had postcoital bleeding for 6 weeks.
Habits - Teetotaler, on 1800 cal. diet
Drugs and medicines - Takes 1 gm. Tolbutamide daily

SYSTEM REVIEW

General (wgt., fever, weakness, etc.) - No recent change
HEENT - Wears glasses for reading
CVR - Sometimes has palpitations
GI - Uses Ex-lax occasionally
GU - Occasional frequency, no dysuria
GYN - Periods 12x30x5, were prolonged and irregular for 3 years before menopause at 48.
NP - Always "nervous."
Musculoskeletal - Frequent backache

0110 Test A - GENERAL PHYSICAL EXAMINATION

TPR, BP - 37°, 80, 18, 180/112
Hgt., wgt. - 5'0", 190 lbs.
General description - Well-developed, obese W.F.
Skin - Moist
Lymphatics - Not enlarged
Head and face - Well-formed
  Hair - Unremarkable
  Eyes - Grade II changes, capillary microaneurisms
  Ears - Left drum perforated
  Nose - Unobstructed
  Mouth, teeth, throat - Nothing abnormal
Neck - Supple
  Trachea - Midline
  Thyroid - Not enlarged
  Vessels - Undistended
Chest - Well-formed
  Breasts and axillae - No abnormalities
  Heart - Normal size, no murmurs
  Lungs - No abnormalities noted
Abdomen - Obese
  Liver, spleen, kidneys - Not felt
  Masses - Not noted
  Tenderness - Not noted
Pelvic examination - Pap smear taken, see report.
  Hair distribution - Normal
  Ext. genitalia - Atrophic
  SUB glands - Not enlarged
  Introitus and perineum - Intact
  Vagina - Atrophic
  Cervix - Atrophic
  Uterus - Not enlarged, mid-position
  Adnexa - Not palpable
Rectal - Confirms pelvic findings
  Sphincter - Intact
  Masses - None palpable
Back - No abnormalities noted
Extremities - Well-formed
Pulses - All present and equal
Deep tendon reflexes - Physiologic
Neurological - Within normal limits

Test A - DIAGNOSTIC STUDIES AND PROCEDURES

CHEMISTRIES (blood, serum)
- Alk. phosphatase - 4 K-A units/100 ml.
- Bilirubin, direct, indirect - Report not available
- Glucose, 2 hr. postprandial - 180 mg%
- Electrolytes, Na, K, Cl, CO_2 - Na 140, K 3.8, Cl 98, CO_2 25
- Urea nitrogen (BUN) - 10 mgm%

CLINICAL AND CYTOPATHOLOGY
- Stool for blood, OCP - Negative
- Cervico-vaginal pap smear - Class IV (positive) malignant cells present

SEROLOGY
- VDRL - Non-reactive

HEMATOLOGY
- Blood group, and Rh - O, Rh positive
- CBC - Hct. 36, WBC 8,000, differential normal

URINE TESTS
- Urinalysis, complete - Specific gravity 1.010, pH 5.8, glucose 2+, acetone negative, albumin positive, microscopic: occasional WBC

X-RAYS
- Abdomen - Negative
- Barium enema - Negative
- Chest - Negative film; heart normal size
- Cholecystogram - Report not available
- GI series - No abnormalities
- Pelvis - Negative
- Pyelogram (IVP) - Negative
- Skull - Negative
- Spine - Negative

PROCEDURES
- BSP - Less than 6% retention at 45 minutes
- Cystoscopy - No abnormalities
- Darkfield exam for T. Pallidum - Negative
- Electrocardiogram - Left ventricular hypertrophy
- Examination under anesthesia - Findings: same as noted elsewhere
- Frei test - Negative
- Glucose tolerance test - F 100, 1 hr. 220, 2 hr. 190, 3 hr. 140
- PPD or Tuberculin test - Positive
- Proctosigmoidoscopy - Negative
- PSP - 40% excretion in 15 minutes
- Smears for Donovan bodies - Negative
- Smears for H. Ducreyi - Negative

DIAGNOSTIC SURGERY
- Biopsy cervix (punch) - Chronic cervicitis with squamous metaplasia
- Biopsy vagina - Not indicated
- Conization of cervix - Chronic cervicitis with squamous metaplasia
- D & C, endocervix - Endocervical tissue
- D & C, endometrium - Adenoacanthoma
- Exploratory laparotomy - No evidence of extension beyond the uterus, no enlarged lymph nodes or signs of peritoneal spread.

APPENDIX I - 6 THERAPEUTIC PRODUCT

TEST A

Fifty year old obese, hypertensive, diabetic woman two years postmenopausal with vaginal bleeding. Physical examination and diagnostic workup is entirely negative, except fractional D & C which shows adenoacanthoma of endometrium without involvement of endocervix. Established diagnoses upon which treatment should be based:

Adenoacanthoma, primary, of endometrium, Stage I	551
Diabetes mellitus	592
Exogenous obesity	593
Pulmonary tuberculosis, inactive	598

APPENDIX J

TRIAL WEIGHTING SYSTEM, DIAGNOSTIC PROCESS

PAGE

J - 1 As of 9/24/65 199

J - 2 As of 11/1/65 200

J - 3 As of 3/20/67 201

J - 4 As of 7/67 (Luther - 1)* 202

J - 5 As of 7/67 (Luther - 2)* 203

* Same as 3/20/67 but for ease in scoring.

APPENDIX J-1 Trial Weighting System

Diagnostic Process

replaced 11/1/65

← CRITERION RESPONSE →

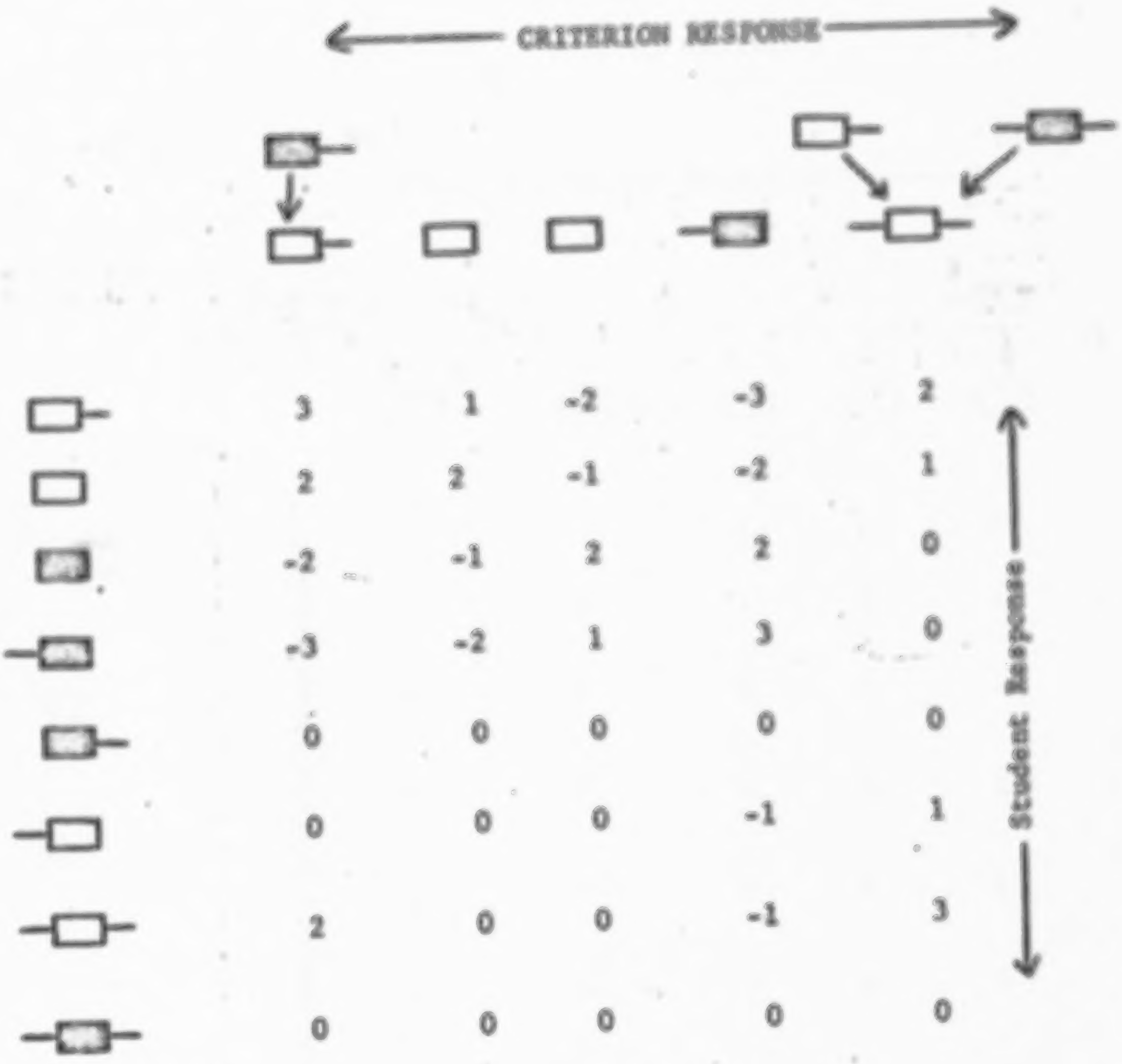
Student Response ↕

	■– ↓ □–	□	■	–■	□– –■– ↘ ↙ –□–
□–	2	1	-1	-2	2
□	1	1	-1	-2	1
■	-2	-1	1	0	0
–■	-2	-1	1	2	0
■–	0	0	0	-1	0
–□	0	0	0	-1	1
–□–	2	0	0	-1	2
–■–	0	0	0	0	0

APPENDIX J-2 Trial Weighting System

Diagnostic Process

as of 11/1/65



CRITERION RESPONSE

Student Response

	▨– → ▭–	▭	▭	–▨	▭– → –▭– ← –▨–
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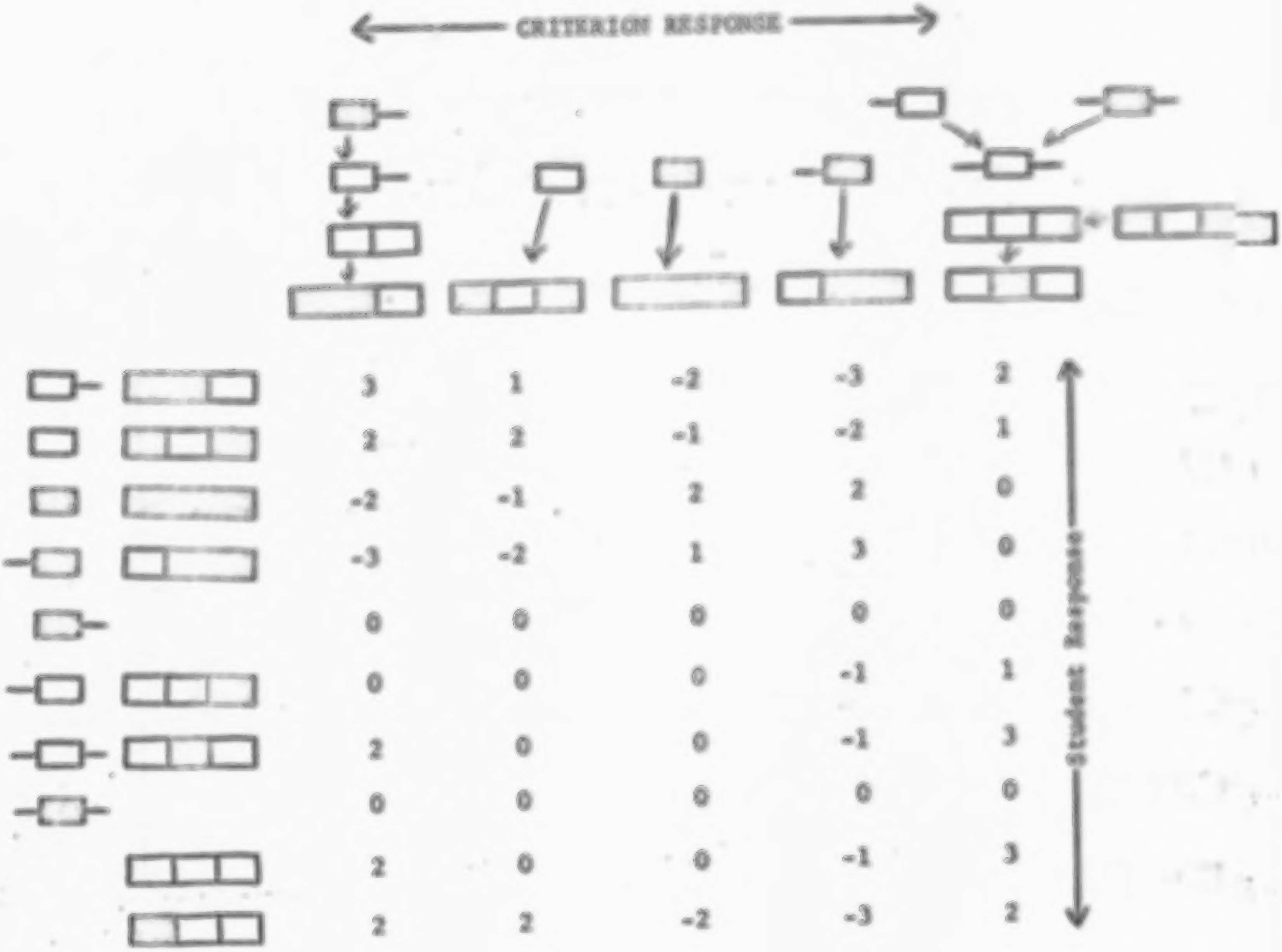
▭	2	2	-1	-2	1
▨	-2	-1	2	2	0
–▨	-3	-2	1	3	0
▨–	0	0	0	0	0
–▭	0	0	0	-1	1
–▭–	2	0	0	-1	3
–▨–	0	0	0	0	0

APPENDIX J-3 Trial Weighting System

Diagnostic Process

as of 3/20/67 (same as 11/1/65 but prepared for new answer sheet)


CRITERION RESPONSE
Student Response

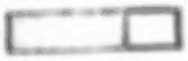
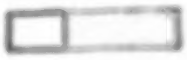
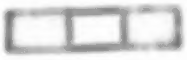
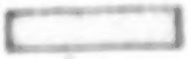
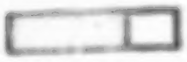
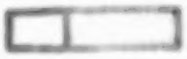
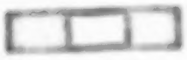
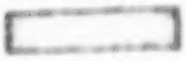
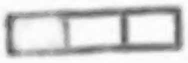
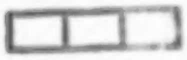
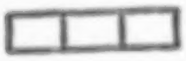
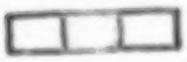
3	1	-2	-3	2
2	2	-1	-2	1
-2	-1	2	2	0
-3	-2	1	3	0
0	0	0	0	0
0	0	0	-1	1
2	0	0	-1	3
0	0	0	0	0
2	0	0	-1	3
2	2	-2	-3	2

APPENDIX J-4 Trial Weighting System

Diagnostic Process

for ease in scoring (Luther-1) as of July 1967 (same as 3/20/67)

← CRITERION RESPONSE →

				
	3	-3	1	-2
	-3	3	-2	1
	2	-2	2	-1
	-2	2	-1	2
	2	-3	2	-2
	0	-1	0	0
	2	-1	0	0
	2	-1	0	0

↑ Student Response ↓

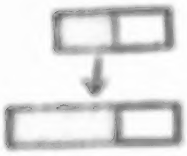
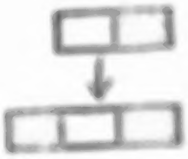
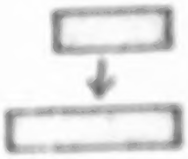
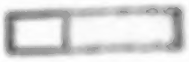
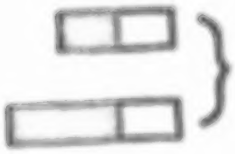
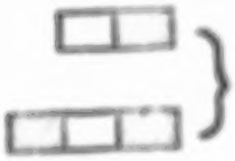
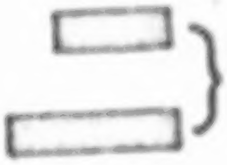
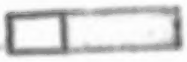
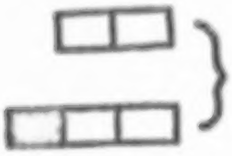
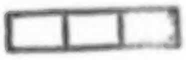
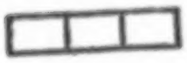
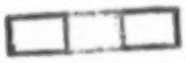
APPENDIX J-5 Trial Weighting System

Diagnostic Process

for scoring ease (Luther-2) as of July 1967 (same as 3/20/67)

← CRITERION RESPONSE →

Student Response

				
	3	1	-2	-3
	2	2	-1	-2
	-2	-1	2	2
	-3	-2	1	3
	2	2	-2	-3
	0	0	0	-1
	2	0	0	-1
	2	0	0	-1

APPENDIX K

TRIAL WEIGHTING SYSTEM, DIAGNOSTIC PRODUCT

PAGE

K - 1 As of 9/24/65 207

K - 2 As of 3/20/67 (Same as 11/1/65) 208

APPENDIX K-1 Trial Weighting System

Diagnostic Product

as of 9/24/65

Student Response ↓ / CRITERION RESPONSE →	= = =	▭ = =	▭ ▭ = = ▭ =	= = ▭ ▭ = ▭ = ▭ ▭
▭ = =		1	-1	-2
= ▭ =		-1	1	0
= ▭ ▭		-2	0	2
= = ▭		-2	0	2
▭ ▭ =		0	-1	-2
▭ = ▭		0	0	0
= = =	0	-1	-1	-1

▭ = = Diagnosis excluded by workup

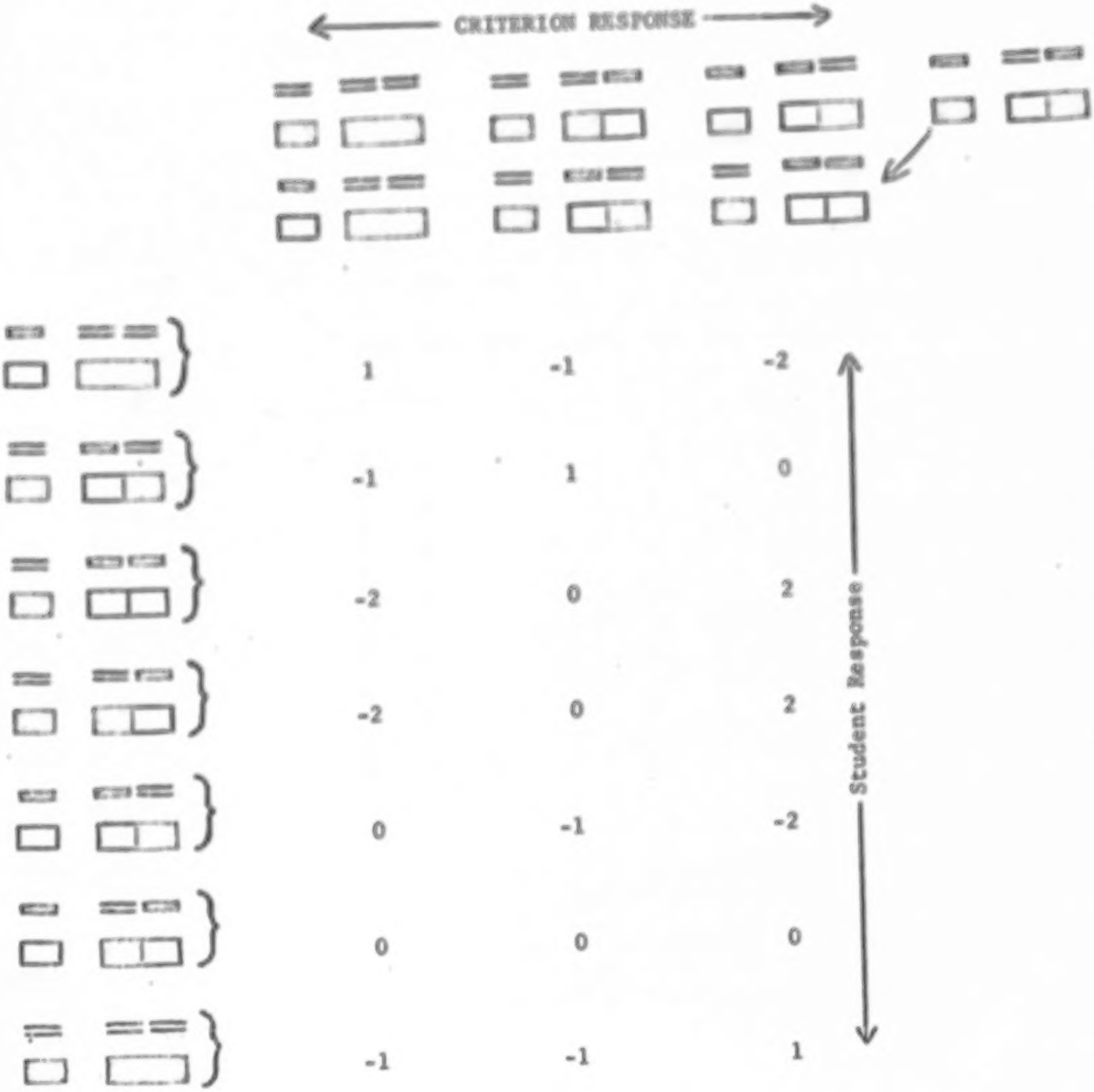
= ▭ = Diagnosis not excluded by workup

= ▭ ▭ Established or most likely diagnosis

APPENDIX K-2 Trial Weighting System

Diagnostic Product

as of 3/20/67 (same as 11/1/65 and 9/24/65) for new answer sheet


CRITERION RESPONSE
Student Response

	1	-1	-2
	-1	1	0
	-2	0	2
	-2	0	2
	0	-1	-2
	0	0	0
	-1	-1	1

APPENDIX L

LISTING OF INDIVIDUAL SCORES

			PAGE
Test A	Pre-Test	(Tables 1 - 2)	211
	Post-Test	(Tables 3 - 7)	215
Test A'	Pre-Test	(Table 8)	229
	Post-Test	(Tables 9 - 14)	230
Test A	Pre-Test	(Table 15)	238
	Post-Test	(Tables 16 - 27)	239

TABLE 1

Test A, Medical College of Georgia
Pre-test, 2/7/66, 24 3rd year students

STUDENT NO.	HISTORY	PHYSICAL	LABORATORY	DIAGNOSIS	TREATMENT
Maximum Score	59	109	98		
00625	13	38	39	excellent-2, good-1	alternate correct-1, fatal mismgt.-1
00626	11	85	28	fair-2, bad-1	inappropriate-1, alternate correct-1
00627	13	1	29	good-1, bad-1, fair-1	fatal mismgt.-1, alternate correct-1
00628	43	100	34	excellent-1, good-2	acceptable-1, fatal mismgt.-1
00629	7	1	29	bad-3	inappropriate-1, alternate correct-1
00630	42	94	27	bad-1, fair-2	inappropriate-1, alternate correct-1
00631	19	30	26	good-1, bad-1, fair-1	inappropriate-1, alternate correct-1
00632	15	-5	42	bad-2, good-1	inappropriate-1, alternate correct-1
00633	44	87	51	bad-3	inappropriate-1, alternate correct-1
00634	39	92	24	good-2, fair-1	fatal mismgt.-1, alternate correct-1
00635	32	70	29	bad-1, good-2	fatal mismgt.-1, alternate correct-1
00636	5	0	13	fair-2, bad-1	acceptable-1, alternate correct-1
00637	46	89	32	fair-2, bad-1	acceptable-1, alternate correct-1
00638	36	91	50	excellent-2, good-1	fatal mismgt.-1, alternate correct-1
00639	43	89	55	bad-3	fatal mismgt.-1, alternate correct-1
00640	29	58	28	excellent-1, good-2	alternate correct-1, fatal mismgt.-1
00641	45	92	31	good-2, bad-1	fatal mismgt.-1, alternate correct-1
00642	13	11	38	fair-1, bad-1, good-1	acceptable-1, good-1
00643	46	90	33	excellent-2, good-1	fatal mismgt.-1, alternate correct-1
00644	37	91	24	fair-2, bad-1	acceptable-2
00645	36	93	20	good-1, bad-1, fair-1	alternate correct-1, fagal mismgt.-1
00646	38	92	15	excellent-2, good-1	inappropriate-1, fatal mismgt.-1

TABLE 1 (Cont.)

Test A, Medical College of Georgia
Pre-test, 2/7/66, 24 3rd year students

Maximum Score	59	109	98		
STUDENT NO.	HISTORY	PHYSICAL	LABORATORY	DIAGNOSIS	TREATMENT
00647	35	62	22	excellent-1, good-2	inadequate-1, alternate correct-1
00648	47	96	29	fair-2, bad-1	inappropriate-1, alternate correct-1

TABLE 2

Test A, Medical College of Georgia
Pre-test, 4/11/66, 24 3rd year students

STUDENT NO.	HISTORY	PHYSICAL	LABORATORY	DIAGNOSIS	TREATMENT
Maximum Score	59	109	98		
00680	32	13	12	excellent-2, good-1	acceptable-1, alternate correct-1
00681	35	93	50	excellent-2, good-1	best-1, fatal mismgt.-1
00682	31	59	16	fair-2, good-1	incomplete-1, alternate correct-1
00683	39	96	39	excellent-3	incomplete-1, alternate correct-1
00684	37	69	21	fair-2, bad-1	inadequate-1, alternate correct-1
00685	27	33	32	fair-2, bad-1	fatal mismgt.-1, alternate correct-1
00686	4	-4	40	excellent-2, good-1	inappropriate-1, alternate correct-1
00687	20	40	14	bad-2, fair-1	fatal mismgt.-1, alternate correct-1
00688	46	80	40	fair-2, bad-1	acceptable-1, fatal mismgt.-1
00689	4	36	44	excellent-1, good-2	alternate correct-1, fatal mismgt.-1
00690	29	37	24	excellent-3	fatal mismgt.-1, alternate correct-1
00691	6	24	9	fair-2, bad-1	fatal mismgt.-1, alternate correct-1
00692	22	103	32	excellent-2, good-1	best-1, inappropriate-1
00693	47	66	42	excellent-1, good-1, bad-1	best-1, fatal mismgt.-1
00694	44	90	50	good-3	fatal mismgt.-1, alternate correct-1
00695	43	92	37	good-1, bad-1, fair-1	alternate correct-1, fatal mismgt.-1
00696	36	91	53	bad-3	acceptable-1, alternate correct-1
00697	39	91	31	fair-1, bad-2	acceptable-1, fatal mismgt.-1
00698	39	87	39	fair-2, bad-1	inappropriate-1, alternate correct-1
00699	26	39	37	excellent-3	best-1, inappropriate-1
00700	20	10	37	bad-2, fair-1	fatal mismgt.-1, alternate correct-1
00701	38	77	-1	excellent-2, good-1	fatal mismgt.-1, alternate correct-1

TABLE 2 (Cont.)

Test A, Medical College of Georgia
Pre-test, 4/11/66, 24 3rd year students

Maximum Score	59	109	98		
STUDENT NO.	HISTORY	PHYSICAL	LABORATORY	DIAGNOSIS	TREATMENT
00702	18	19	27	good-3	fatal mismgt.-1, alternate correct-1
00703	37	40	50	good-3	fatal mismgt.-1, alternate correct-1

TABLE 3

Test A, Medical College of Georgia
Post-test, 11/8/65, 22 3rd year students

STUDENT NO.	HISTORY	PHYSICAL	LABORATORY	DIAGNOSIS	TREATMENT
Maximum Score	59	109	98		
00549	36	82	36	excellent-3	fatal mismgt.-1, alternate correct-1
00563	42	93	49	excellent-1, good-1, bad-1	best-1, inappropriate-1
00564	45	82	49	good-1, bad-2	fatal mismgt-1, alternate correct-1
00565	45	71	36	excellent-3	alternate correct-1, inappropriate-1
00566	52	89	53	excellent-3	fatal mismgt-1, alternate correct-1
00567	49	97	63	excellent-2, good-1	alternate correct-1, fatal mismgt.-1
00568	39	95	7	good-3	inappropriate-1, alternate correct-1
00569	42	91	37	excellent-3	best-1, inappropriate-1
00570	40	83	37	bad-1, good-1, fair-1	fatal mismgt.-1, alternate correct-1
00571	46	85	21	good-1, bad-1, fair-1	fatal mismgt.-1, alternate correct-1
00572	5	53	37	bad-3	fatal mismgt.-1, alternate correct-1
00573	37	58	33	bad-3	inadequate-1, alternate correct-1
00574	46	92	17	excellent-2, good-1	best-1, inappropriate-1
00575	45	94	26	excellent-2, good-1	fatal mismgt.-1, alternate correct-1
00576	48	82	62	bad-3	acceptable-1, alternate correct-1
00577	45	90	61	bad-3	fatal mismgt.-1, alternate correct-1
00578	47	89	49		fatal mismgt.-1, alternate correct-1
00579	45	96	38	excellent-3	fatal mismgt.-1, alternate correct-1
00580	45	91	54	excellent-3	fatal mismgt.-1, alternate correct-1
00581	46	89	46	excellent-3	fatal mismgt.-1, alternate correct-1
00582	44	88	58	excellent-2, good-1	fatal mismgt.-1, alternate correct-1
00583	45	94	41	excellent-3	incomplete-1, alternate correct-1

TABLE 4

Test A, Medical College of Georgia
Post-test, 1/17/66, 22 3rd year students

Maximum Score	59	109	98		
STUDENT NO.	HISTORY	PHYSICAL	LABORATORY	DIAGNOSIS	TREATMENT
00600	46	93	29	good-1, bad-1, fair-1	best-1, good-1
00601	28	88	24	fair-2, bad-1	inappropriate-1, alternate correct-1
00602	34	93	26	excellent-1, bad-1, good-1	fatal mismgt.-1, alternate correct-1
00603	42	95	57	fair-2, bad-1	acceptable-1, fatal mismgt.-1
00604	34	89	36	fair-2, bad-1	inappropriate-1, alternate correct-1
00605	29	91	21	bad-2, good-1	fatal mismgt.-1, alternate correct-1
00606	37	86	30	excellent-3	alternate correct-1, fatal mismgt.-1
00607	22	90	32	excellent-1, fair-2	fatal mismgt.-1, alternate correct-1
00608	46	92	36	good-1, bad-1, fair-1	fatal mismgt.-1, alternate correct-1
00609	40	91	1	good-3	inappropriate-1, alternate correct-1
00610	41	93	36	excellent-3	fatal mismgt.-1, alternate correct-1
00611	45	86	33	excellent-3	fatal mismgt.-1, alternate correct-1
00612	48	90	29	bad-2, good-1	fatal mismgt.-1, alternate correct-1
00613	41	87	42	good-1, bad-1, fair-1	inappropriate-1, alternate correct-1
00614	47	90	16	fair-2, bad-1	acceptable-1, fatal mismgt.-1
00615	47	94	42	fair-1, bad-1	inadequate-1, alternate correct-1
00616	46	89	48	bad-3	acceptable-1, fatal mismgt.-1
00617	46	80	34	excellent-1, good-2	best-1, inappropriate-1
00618	49	93	55	good-3	inappropriate-1, alternate correct-1
00619	48	88	39	fair-2, bad-1	acceptable-1, fatal mismgt.-1
00620	46	98	47	fair-2, bad-1	fatal mismgt.-1, alternate correct-1
00621	30	66	51	fair-2, bad-1	inadequate-1, alternate correct-1

TABLE 5

Test A, Medical College of Georgia
Post-test, 5/23/67, 93 3rd year students

Maximum Score	59	109	98		
STUDENT NO.	HISTORY	PHYSICAL	LABORATORY	DIAGNOSIS	TREATMENT
01093	45	93	31	fair-1, bad-2	good-2, fair-2
01094	46	94	14	good-3	bad-3, fair-1
01095	46	89	62	excellent-3	good-1, bad-3
01096	40	85	53	fair-2, bad-1	good-2, bad-1, fair-1
01097	47	89	33	fair-2, bad-1	bad-2, fair-2
01098	46	92	54	fair-2, bad-1	bad-4
01099	46	89	46	fair-2, bad-1	good-2, bad-1 fair-1
01100	31	87	20	excellent-2, good-1	incomplete-1, good-1 bad-2
01101	39	90	45	fair-2, bad-1	bad-4
01102	47	67	55	fair-2, bad-1	bad-4
01103	0	-9	29	excellent-3	bad-3, fair-1
01104	47	90	36	excellent-2, good-1	bad-3, fair-1
01105	46	80	30	excellent-3	incomplete-1, bad-2, good-1
01106	32	87	57	excellent-3	bad-3, good-1
01107	18	59	41	fair-2, bad-1	good-2, bad-1, fair-1
01108	46	91	6	excellent-3	good-2, fair-1
01109	49	85	19	excellent-3	bad-4, fair-1
01110	21	54	41	excellent-2, good-1	good-2, fair-2
01111	46	92	35	excellent-1, good-1 bad-1	bad-4
01112	42	82	31	bad-1, fair-2	bad-4
01113	34	71	38	fair-2, bad-1	bad-4
01114	43	89	41	bad-2, fair-1	bad-3, fair-1

TABLE 5 (Cont.)

Test A, Medical College of Georgia
Post-test, 5/23/67, 93 3rd year students

Maximum Score	59	109	98		
STUDENT NO.	**HISTORY**	**PHYSICAL**	**LABORATORY**	**DIAGNOSIS**	**TREATMENT**
01115	29	81	28	good-2, excellent-1	bad-4
01116	33	82	37	excellent-3	bad-3, fair-1
01117	47	88	30	bad-3	excellent-2, bad-1, fair-1
01118	45	95	48	excellent-3	bad-4
01119	48	89	14	bad-3	bad-3, incomplete-1
01120	37	88	6	bad-2, fair-1	bad-3, fair-1
01121	33	91	22	excellent-2, good-1	bad-2, fair-1, good-1
01122	42	89	4	excellent-2, good-1	good-2, fair-2
01123	46	89	54	excellent-2, good-1	bad-4
01124	37	49	42	fair-2, bad-1	good-2, bad-1, fair-1
01125	44	89	23	fair-2, bad-1	bad-3, fair-1
01126	45	96	54	excellent-1, good-1, bad-1	excellent-1, bad-1, fair-2
01127	47	89	35	fair-2, bad-1	bad-3, fair-1
01128	46	82	36	excellent-2, good-1	fair-3, good-1
01129	35	57	60	good-1, bad-1, fair-1	excellent-2, fair-1, bad-1
01130	40	92	31	fair-2, bad-1	good-2, bad-1, fair-1
01131	46	80	42	fair-1, bad-1, good-1	bad-2, incomplete-2
01132	43	91	28	good-1, bad-1, fair-1	fair-3, good-1
01133	45	93	33	excellent-2, good-1	fair-3, good-1
01134	44	91	27	good-2, excellent-1	excellent-1, good-2, fair-1
01135	9	32	47	fair-2, bad-1	bad-3, fair-1
01136	47	91	49	excellent-3	excellent-1, fair-2, good-1

TABLE 5 (Cont.)

Test A, Medical College of Georgia
Post-test, 5/23/67, 93 3rd year students

Maximum Score	59	109	98		
STUDENT NO.	HISTORY	PHYSICAL	LABORATORY	DIAGNOSIS	TREATMENT
01137	33	82	57	fair-2, bad-1	bad-4
01138	47	92	36	excellent-3	fair-1, bad-3
01139	43	84	34	excellent-3	bad-3, fair-1
01140	46	86	32	excellent-3	bad-2, good-1, fair-1
01141	40	57	34	excellent-1, good-2	bad-2, fair-2
01142	33	91	19	excellent-2, good-1	bad-4
01143	44	66	56	excellent-2, good-1	excellent-1, fair-1, bad-2
01144	47	80	22	bad-3	bad-4
01145	44	91	63	fair-2, bad-1	bad-4
01146	43	9	44	fair-2, bad-1	bad-4
01147	46	80	49	fair-2, bad-1	bad-4
01148	44	89	12	fair-2, bad-1	fair-1, incomplete-1, bad-2
01149	46	91	25	excellent-3	excellent-1, good-1, fair-2
01150	46	90	13	bad-1, fair-2	fair-1, bad-3
01151	47	91	42	good-1, bad-1, fair-1	good-2, bad-2
01152	43	81	23	excellent-3	excellent-2, bad-1, fair-1
01153	39	91	32	bad-1, fair-2	good-1, bad-3
01154	47	86	31	bad-3	bad-4
01155	33	84	19	bad-1, fair-2	bad-4
01156	40	90	17	excellent-2, good-1	good-1, bad-3
01157	44	85	75	bad-1, fair-2	fair-1, bad-3
01158	47	87	51	excellent-1, bad-2	good-1, bad-3

TABLE 5 (Cont.)

Test A, Medical College of Georgia
Post-test, 5/23/67, 93 3rd year students

STUDENT NO.	HISTORY	PHYSICAL	LABORATORY	DIAGNOSIS	TREATMENT
Maximum Score	59	109	98		
01159	36	88	57	excellent-3	bad-4
01160	47	88	37	bad-1, fair-2	bad-4
01161	36	82	38	bad-1, fair-2	bad-4
01162	48	92	40	good-1, bad-1, fair-1	good-1, bad-3
01163	46	82	43	excellent-3	bad-4
01164	46	80	30	fair-1, bad-1, good-1	good-1, fair-2, bad-1
01165	44	93	46	excellent-3	good-1, bad-3
01166	26	77	27	excellent-1, good-2	bad-2, good-1, fair-1
01167	30	89	50	good-1, excellent-2	bad-4
01168	46	93	33	bad-1, fair-2	fair-1, bad-3
01169	37	62	58	bad-1, fair-2	fair-1, bad-3
01170	6	-3	36	good-1, bad-1, fair-1	good-1, bad-3
01171	27	86	43	excellent-1, good-2	bad-1, fair-1, excellent-2
01172	38	91	33	bad-1, fair-2	good-1, bad-3
01173	17	19	66	bad-1, fair-2	bad-4
01174	46	92	33	excellent-3	bad-2, fair-1, good-1
01175	46	93	31	good-1, excellent-3	bad-2, fair-2
01176	37	94	27	bad-1, fair-2	fair-1, bad-3
01177	46	92	28	bad-1, fair-2	fair-1, bad-3
01178	46	91	34	excellent-1, good-2	bad-1, fair-1, excellent-2
01179	44	94	49	good-1, excellent-2	fair-1, bad-3
01180	37	89	51	bad-1, fair-2	bad-4

TABLE 5 (Cont.)

Test A, Medical College of Georgia
Post-test, 5/23/67, 93 3rd year students

Maximum Score	59	109	98		
STUDENT NO.	HISTORY	PHYSICAL	LABORATORY	DIAGNOSIS	TREATMENT
01181	35	92	40	bad-1, fair-2	fair-1, bad-3
01182	31	88	49	bad-1, excellent-2	good-1, fair-1, bad-2
01183	47	87	47	good-1, bad-1, fair-1	fair-1, bad-3
01184	41	90	50	excellent-3	excellent-2, bad-1, fair-1
01185	47	83	47	good-1, excellent-3	bad-1, excellent-1, good-2

TABLE 6

Test A, Medical College of Georgia
Post-test, 5/23/66, 31 4th year students

STUDENT NO.	HISTORY	PHYSICAL	LABORATORY	DIAGNOSIS	TREATMENT
Maximum Score	59	109	98		
00791	33	81	31	excellent-2, good-1	fatal mismgt.-1, alternate correct-1
00792	8	29	50	good-1, bad-1, fair-1	fatal mismgt.-1, alternate correct-1
00793	7	28	57	bad-2, good-1	fatal mismgt.-1 alternate correct-1
00794	34	9	43	good-1, bad-1, fair-1	acceptable-1, alternate correct-1
00795	12	21	28	good-1, bad-1, fair-1	incomplete-1, alternate correct-1
00796	30	80	31	excellent-2, good-1	inadequate-1, alternate correct-1
00797	16	-17	44	fair-2, bad-1	inappropriate-1, alternate correct-1
00798	45	13	43	fair-2, bad-1	acceptable-1, fatal mismgt.-1
00799	-6	-22	29	bad-2, good-1	inadequate-1, alternate correct-1
00800	39	90	39	good-3	fatal mismgt.-1, alternate correct-1
00801	27	44	48	excellent-2, good-1	fatal mismgt.-1, alternate correct-1
00802	33	94	31	excellent-2, good-1	alternate correct-1, fatal mismgt.-1
00803	9	2	59	excellent-1, good-1, bad-1	inadequate-1, alternate correct-1
00804	-1	-2	40	good-2, excellent-1	fatal mismgt.-1, alternate correct-1
00805	14	15	43	fair-2, bad-1	fatal mismgt.-1, alternate correct-1
00806	32	81	39	good-1, bad-1, fair-1	inadequate-1, alternate correct-1
00807	-10	-15	27	excellent-1, fair-1, good-1	inappropriate-1, alternate correct-1
00808	18	18	46	excellent-2, good-1	inadequate-1, alternate correct-1
00809	20	40	31	excellent-1, good-1, bad-1	inadequate-1, alternate correct-1
00810	23	60	33	fair-2, bad-1	fatal mismgt.-1, alternate correct-1
00811	43	90	27	fair-2, bad-1	fatal mismgt.-1, alternate correct-1
00812	42	85	58	fair-2, bad-1	fatal mismgt.-1, alternate correct-1

TABLE 6 (Cont.)

Test A, Medical College of Georgia
Post-test, 5/23/66, 31 4th year students

STUDENT NO.	HISTORY	PHYSICAL	LABORATORY	DIAGNOSIS	TREATMENT
Maximum Score	59	109	98		
00813	43	84	46	fair-2, bad-1	fatal mismgt.-1, alternate correct-1
00814	40	89	35	fair-2, bad-1	inappropriate-1, alternate correct-1
00815	46	91	32	excellent-3	inadequate-1, alternate correcte-1
00816	34	89	28	fair-2, bad-1	incomplete-1, alternate correct-1
00817	40	82	46	good-1, bad-1, fair-1	fatal mismgt.-1, alternate correct-1
00818	42	83	40	fair-2, good-1	inadequate-1, alternate correct-1
00819	16	3	38	good-1, bad-1, fair-1	fatal mismgt.-1, alternate correct-1
00820	34	84	37	excellent-2, good-1	fatal mismgt.-1, alternate correct-1

TABLE 7

Test A, Medical College of Georgia
Post-test, 5/22/67, 90 4th year students

	HISTORY	PHYSICAL	LABORATORY		
Maximum Score	59	109	98		
STUDENT NO.	**HISTORY**	**PHYSICAL**	**LABORATORY**	**DIAGNOSIS**	**TREATMENT**
01186	2	31	61		
01187	43	79	44	excellent-2, good-1	good-2, bad-1, fair-1
01188	47	91	40	bad-2, excellent-1	good-2, bad-2
01189	33	85	15	excellent-3	good-1, fair-3
01190	39	91	0	good-1, excellent-2	good-1, fair-1, bad-2
01191	42	82	25	good-1, excellent-2	excellent-1, good-1, fair-2
01192	46	83	18	excellent-3	bad-4
01193	31	97	40	bad-1, fair-2	excellent-1, good-1, fair-2
01194	33	43	42	good-1, fair-2	bad-2, incomplete-2
01195	28	26	31	good-1, bad-1, excellent-1	good-1, bad-3
01196	46	83	40	excellent-3	fair-1, bad-3
01197	46	80	29	good-1, bad-1, fair-1	bad-1, fair-3
01198	47	66	32	excellent-3	excellent-1, fair-3
01199	28	49	39	bad-1, fair-2	fair-1, bad-3
01200	46	82	12	fair-1, bad-1, good-1	fair-1, bad-2, incomplete-1
01201	33	90	25	excellent-1, fair-1, bad-1	bad-3, good-1
01202	46	80	65	good-1, excellent-2	bad-4
01203	46	79	37	bad-3	incomplete-1, bad-3
01204	-8	-31	42	excellent-1, fair-1, good-1	bad-2, good-1, fair-1
01205	25	94	23	excellent-1, good-2	excellent-2, fair-2
01206	31	-2	29	bad-1, fair-2	bad-2, fair-1, good-1
01207	46	61	59	good-1, excellent-2	bad-2, fair-2

TABLE 7 (Cont.)

Test A, Medical College of Georgia
Post-test, 5/22/67, 90 4th year students

Maximum Score	59	109	98		
STUDENT NO.	HISTORY	PHYSICAL	LABORATORY	DIAGNOSIS	TREATMENT
01208	26	93	24	good-1, excellent-2	excellent-1, good-1, fair-2
01209	43	78	48	bad-1, fair-2	bad-4
01210	33	85	49	excellent-3	excellent-2, good-2
01211	46	93	37	good-1, excellent-2	excellent-1, good-1, fair-2
01212	37	80	19	excellent-3	good-1, fair-1, bad-2
01213	43	77	24	good-1, bad-2	fair-1, good-1, bad-2
01214	43	94	23	excellent-3	good-1, fair-1, bad-2
01215	42	91	15	excellent-3	bad-2, incomplete-2
01216	46	84	29	good-1, bad-1, excellent-1	bad-4
01217	46	92	26	good-1, excellent-2	bad-2, fair-2
01218	39	81	40	excellent-3	good-1, fair-3
01219	39	91	22	good-1, excellent-2	bad-2, fair-2
01220	47	89	47	excellent-1, good-2	good-1, fair-1, excellent-2
01221	46	89	30	good-1, excellent-2	fair-1, bad-3
01222	47	88	22	bad-1, fair-2	incomplete-1, bad-3
01223	10	92	38	good-1, excellent-2	excellent-1, good-1, fair-2
01224	51	91	41	good-1, bad-2	good-1, bad-3
01225	45	88	40	fair-1, good-2	bad-4
01226	11	89	27	excellent-1, good-2	bad-4
01227	40	93	55	excellent-1, fair-1, bad-1	excellent-2, bad-1, good-1
01228	42	87	48	good-1, excellent-2	excellent-2, bad-2
01229	37	80	41	fair-1, excellent-2	bad-1, fair-3

TABLE 7 (Cont.)

Test A, Medical College of Georgia
Post-test, 5/22/67, 90 4th year students

STUDENT NO.	HISTORY	PHYSICAL	LABORATORY	DIAGNOSIS	TREATMENT
Maximum Score	59	109	98		
01230	58	60	29	excellent-3	bad-4
01231	32	86	35	bad-3	bad-4
01232	21	66	17	good-1, excellent-2	fair-1, bad-3
01233	25	82	20	bad-3	bad-2, fair-2
01234	46	22	52	good-1, excellent-2	excellent-2, fair-1, good-1,
01235	44	91	36	excellent-3	bad-4
01236	30	82	28	excellent-3	good-1, fair-1, bad-2
01237	41	94	41	excellent-3	fair-1, bad-3
01238	32	92	52	good-1, excellent-2	fair-2, bad-2
01239	46	90	31	good-1, bad-1, fair-1	bad-4
01240	40	94	53	good-2, bad-1	fair-1, bad-3
01241	46	92	34	excellent-1, good-2	bad-4
01242	44	90	29	good-1, excellent-2	excellent-1, bad-1, good-1, fair-1
01243	29	95	23	good-1, excellent-2	bad-4
01244	46	92	28	bad-1, fair-2	bad-4
01245	41	82	47	bad-1, good-2	bad-4
01246	44	92	76	excellent-1, good-2	excellent-1, good-1, bad-1, fair-1
01247	50	93	31	good-2, bad-1	fair-1, bad-3
01248	2	-5	31	fair-1, bad-1, good-1	bad-4
01249	47	92	43	good-1, excellent-2	bad-4
01250	44	91	35	excellent-3	good-2, bad-1, fair-1
01251	48	87	28	excellent-3	bad-2, fair-2

TABLE 7 (Cont.)

Test A, Medical College of Georgia
Post-test, 5/22/67, 90 4th year students

STUDENT NO.	HISTORY	PHYSICAL	LABORATORY	DIAGNOSIS	TREATMENT
Maximum Score	59	109	98		
01252	47	90	49	good-1, bad-1, fair-1	bad-2, fair-1, good-1
01253	38	80	64	excellent-2, good-1	excellent-2, good-1, fair-1
01254	46	80	40	good-1, excellent-2	good-1, excellent-1, fair-2
01255	46	92	27	good-1, excellent-2	fair-1, bad-3
01256	27	88	48	excellent-1, good-2	good-1, fair-1, bad-2
01257	35	98	20	excellent-1, fair-2	bad-2, fair-2
01258	46	95	55	good-1, excellent-2	bad-4
01259	42	85	60	bad-3	excellent-1, bad-1, fair-2
01260	46	91	68	excellent-3	fair-1, bad-3
01261	45	89	38	excellent-3	fair-2, bad-2
01262	45	92	44	excellent-3	good-1, bad-3
01263	46	80	27	good-1, excellent-2	fair-1, bad-3
01264	32	81	57	good-1, excellent-2	bad-4
01265	46	91	17	excellent-1, good-2	bad-1, excellent-1, fair-1, good-1
01266	43	83	30	excellent-3	excellent-1, good-1, fair-2
01267	46	89	21	excellent-3	excellent-2, good-1, fair-2
01268	46	80	43	excellent-3	excellent-1, fair-1, good-2
01269	41	91	55	excellent-3	excellent-1, good-1, fair-2
01270	16	92	42	bad-1, fair-2	bad-4
01271	48	90	26	excellent-3	fair-1, bad-3
01272	35	78	44	excellent-3	bad-4
01273	47	38	31	excellent-1, good-2	fair-1, bad-3

TABLE 7 (Cont.)

Test A, Medical College of Georgia
Post-test, 5/22/67, 90 4th year students

STUDENT NO.	HISTORY	PHYSICAL	LABORATORY	DIAGNOSIS	TREATMENT
Maximum Score	59	109	98		
01274	48	92	33	good-1, bad-1, fair-1	bad-1, fair-1, good-2
01275	43	61	50	excellent-1, good-2	bad-4

TABLE 8

Test A', Medical College of Georgia
Pre-test, 10/3/65, 22 3rd year students

Maximum Score	59	109	98		
STUDENT NO.	HISTORY	PHYSICAL	LABORATORY	DIAGNOSIS	TREATMENT
00500	49	42	43		
00501	49	87	6		
00502	53	82	30		
00503	57	97	28		
00504	38	86	28		
00505	49	95	40		
00506	33	30	38		
00507	19	23	53		
00509	11	11	4		
00510	7	-2	8		
00511	44	100	38		
00512	23	11	20		
00513	24	52	23		
00514	52	94	51		
00515	55	92	42		
00516	37	94	30		
00517	25	-13	45		
00518	-5	-2	47		
00519	43	97	33		
00520	35	97	29		
00521	52	63	44		
00522	52	94	24		

TABLE 9

Test A', Medical College of Georgia
Post-test, 5/24/66, 92 3rd year students

STUDENT NO.	HISTORY	PHYSICAL	LABORATORY	DIAGNOSIS	TREATMENT
Maximum Score	59	109	98		
00820	28	42	47		
00825	10	-2	31		
00826	49	88	47		
00827	48	91	26		
00828	51	96	58		
00830	53	97	58		
00831	53	92	69		
00832	48	71	52		
00833	22	21	39		
00834	19	82	28		
00835	46	92	56		
00836	51	91	16		
00837	45	91	3		
00838	36	73	43		
00839	46	85	25		
00840	46	80	58		
00841	51	89	59		
00842	42	101	43		
00843	13	14	34		
00844	48	54	52		
00845	49	90	52		
00846	41	73	51		
00847	49	94	44		
00848	35	89	50		
00849	49	90	37		
00850	47	98	49		
00851	43	103	54		
00852	47	89	47		
00853	53	87	56		
00854	53	99	13		
00855	57	90	44		
00856	52	92	58		
00857	51	102	44		
00858	49	81	53		
00859	47	90	42		

TABLE 9 (Cont.)

Test A', Medical College of Georgia
Post-test, 5/24/66, 92 3rd year students

Maximum Score	59	109	98		
STUDENT NO.	HISTORY	PHYSICAL	LABORATORY	DIAGNOSIS	TREATMENT
00860	47	87	34		
00861	46	80	28		
00862	51	92	52		
00863	47	86	60		
00864	52	94	44		
00865	28	35	52		
00866	52	90	34		
00867	50	92	41		
00868	49	80	68		
00869	48	94	54		
00870	48	89	43		
00871	52	99	42		
00872	5	52	22		
00873	34	52	46		
00874	46	80	23		
00875	51	94	54		
00876	58	78	40		
00877	48	92	53		
00878	43	89	51		
00879	46	87	34		
00880	55	95	53		
00881	38	91	29		
00882	49	95	46		
00883	48	95	39		
00884	30	91	62		
00885	53	99	49		
00886	49	89	33		
00887	49	94	46		
00888	53	93	22		
00889	30	13	25		
00890	49	88	43		
00891	50	61	40		
00892	52	89	48		
00893	48	91	48		
00894	54	88	56		
00895	54	95	78		
00896	36	88	52		
00897	45	87	33		
00898	50	94	12		
00899	51	79	54		

TABLE 9 (Cont.)

Test A', Medical College of Georgia
Post-test, 5/24/66, 92 3rd year students

Maximum Score	59	109	98		
STUDENT NO.	HISTORY	PHYSICAL	LABORATORY	DIAGNOSIS	TREATMENT
00900	49	93	52		
00901	34	97	51		
00902	51	88	59		
00903	51	84	54		
00904	46	80	55		
00905	53	90	64		
00906	46	80	60		
00907	46	80	57		
00908	45	96	34		
00909	52	92	45		
00910	48	96	47		
00911	52	90	62		
00912	54	89	44		
00913	46	92	51		
00914	36	81	41		
00915	48	88	34		
00916	42	88	17		

TABLE 10

Test A', Medical College of Georgia
Post-test, 11/1/66, 12 3rd year students

Maximum Score	59	109	98		
STUDENT NO.	HISTORY	PHYSICAL	LABORATORY	DIAGNOSIS	TREATMENT
01057	53	95	60		
01058	47	93	33		
01059	49	97	33		
01060	50	92	45		
01061	19	30	62		
01062	49	93	44		
01063	44	96	53		
01064	55	93	44		
01065	45	87	62		
01066	52	97	45		
01067	45	87	39		
01068	48	83	30		

TABLE 11

Test A', Medical College of Georgia
Post-test, 1/16/67, 11 3rd year students

Maximum Score	59	109	98		
STUDENT NO.	HISTORY	PHYSICAL	LABORATORY	DIAGNOSIS	TREATMENT
01000	23	86	52		
01002	46	80	62		
01003	54	99	43		
01005	48	96	11		
01008	25	94	51		
01011	6	20	66		
01012	47	89	59		
01013	47	96	54		
01015	55	93	45		
01016	50	88	44		
01017	47	84	49		

TABLE 12

Test A', Medical College of Georgia
Post-test, 3/17/67, 12 3rd year students

Maximum Score	59	109	98		
STUDENT NO.	HISTORY	PHYSICAL	LABORATORY	DIAGNOSIS	TREATMENT
01021	51	51	60		
01022	33	3	48		
01023	49	85	72		
01024	37	70	35		
01025	50	91	39		
01026	42	92	52		
01027	49	88	59		
01028	32	90	32		
01029	52	98	38		
01030	52	90	53		
01031	42	55	34		
01032	11	3	59		

TABLE 13

Test A', Medical College of Georgia
Post-test, 5/12/67, 12 3rd year students

Maximum Score	59	109	98		
STUDENT NO.	HISTORY	PHYSICAL	LABORATORY	DIAGNOSIS	TREATMENT
01081	43	88	25		
01082	27	38	35		
01083	-4	27	35		
01084	49	92	36		
01085	34	93	69		
01086	46	80	33		
01087	53	103	48		
01088	47	99	35		
01089	48	83	57		
01090	37	89	74		
01091	54	86	59		
01092	49	99	39		

TABLE 14

Test A', Medical College of Georgia
Post-test, 5/23/66, 30 4th year students

Maximum Score	59	109	98		
STUDENT NO.	HISTORY	PHYSICAL	LABORATORY	DIAGNOSIS	TREATMENT
00761	49	98	13		
00762	45	49	69		
00763	50	82	53		
00764	50	90	27		
00765	50	-6	22		
00766	53	91	41		
00767	-11	18	37		
00768	49	98	20		
00769	52	80	36		
00770	48	100	39		
00771	47	91	47		
00772	38	92	38		
00773	51	93	47		
00774	25	41	39		
00775	-8	37	66		
00776	46	80	39		
00777	47	89	19		
00778	46	80	31		
00779	46	12	27		
00780	36	93	37		
00781	47	97	35		
00782	50	97	55		
00783	53	92	50		
00784	-10	-23	12		
00785	40	90	39		
00786	46	80	68		
00787	49	101	40		
00788	-9	-5	36		
00789	42	85	39		
00790	40	88	36		

TABLE 15

Test A, Medical College of Georgia
Pre-test, 11/29/65, 22 3rd year students

Maximum Score	59	109	98		
STUDENT NO.	**HISTORY**	**PHYSICAL**	**LABORATORY**	**DIAGNOSIS**	**TREATMENT**
00550	49	58	35		
00551	30	56	56		
00553	25	55	11		
00554	6	5	23		
00555	45	74	28		
00556	44	61	42		
00557	56	67	40		
00558	35	63	23		
00559	36	61	42		
00560	28	44	44		
00561	52	69	56		
00562	54	66	22		
00585	51	66	49		
00586	50	57	31		
00587	50	59	25		
00588	46	62	55		
00589	35	54	0		
00590	46	80	8		
00591	53	59	29		
00594	49	44	36		
00595	59	50	43		
00598	48	59	6		

TABLE 16

Test A, Medical College of Georgia
Post-test, 3/14/66, 24 3rd year students

Maximum Score	59	109	98		
STUDENT NO.	**HISTORY**	**PHYSICAL**	**LABORATORY**	**DIAGNOSIS**	**TREATMENT**
00650	45	88	21		
00651	-16	-9	33		
00652	47	88	68		
00653	25	47	55		
00654	49	93	48		
00655	45	89	45		
00656	33	26	47		
00657	52	91	39		
00658	51	97	59		
00659	34	80	30		
00660	18	91	38		
00661	58	94	53		
00662	52	101	46		
00663	48	90	70		
00664	46	92	18		
00665	52	67	35		
00666	13	25	30		
00667	42	89	36		
00668	40	91	35		
00669	51	90	31		
00670	50	95	44		
00671	53	93	51		
00672	49	94	41		
00673	25	64	33		

TABLE 17

Test A, Medical College of Georgia
Post-test, 5/16/66, 24 3rd year students

STUDENT NO.	HISTORY	PHYSICAL	LABORATORY	DIAGNOSIS	TREATMENT
Maximum Score	59	109	98		
00705	6	5	38		
00706	51	94	60		
00707	34	59	44		
00708	57	94	68		
00709	51	101	58		
00710	35	23	46		
00711	36	78	45		
00712	47	84	46		
00713	47	65	42		
00714	52	89	51		
00715	39	87	53		
00716	49	74	72		
00717	50	89	48		
00718	47	87	58		
00719	50	93	44		
00720	31	85	58		
00721	56	92	58		
00722	50	95	69		
00723	51	89	48		
00724	38	87	61		
00725	47	90	37		
00726	50	89	57		
00727	39	88	48		
00728	23	85	58		

TABLE 18

Test A, Medical College of Georgia
Post-test, 11/1/66, 12 3rd year students

STUDENT NO.	HISTORY	PHYSICAL	LABORATORY	DIAGNOSIS	TREATMENT
Maximum Score	59	109	98		
01045	51	88	54		
01046	46	80	67		
01047	54	86	53		
01048	54	88	25		
01049	45	91	31		
01050	50	90	45		
01051	42	97	48		
01052	49	94	60		
01053	25	31	38		
01054	50	94	35		
01055	52	93	45		
01056	34	80	24		

TABLE 19

Test A, Medical College of Georgia
Post-test, 1/16/67, 11 3rd year students

Maximum Score	59	109	98		
STUDENT NO.	HISTORY	PHYSICAL	LABORATORY	DIAGNOSIS	TREATMENT
01001	47	93	55		
01004	38	90	56		
01006	53	83	50		
01007	37	74	55		
01009	50	93	37		
01010	31	92	42		
01014	50	88	65		
01018	47	85	31		
01019	1	13	41		
01020	52	91	48		
01021	33	89	33		

TABLE 20

Test A, Medical College of Georgia
Post-test, 3/17/67, 12 3rd year students

Maximum Score	59	109	98		
STUDENT NO.	HISTORY	PHYSICAL	LABORATORY	DIAGNOSIS	TREATMENT
01033	40	90	58		
01034	43	68	45		
01035	53	91	36		
01036	44	95	62		
01037	46	88	51		
01038	51	89	50		
01039	41	86	53		
01040	52	88	41		
01041	53	90	45		
01042	52	89	61		
01043	44	80	37		
01044	19	88	52		

TABLE 21

Test A, Medical College of Georgia
Post-test, 5/12/67, 12 3rd year students

Maximum Score	59	109	98		
STUDENT NO.	HISTORY	PHYSICAL	LABORATORY	DIAGNOSIS	TREATMENT
01069	54	100	60		
01070	44	100	41		
01071	36	80	22		
01072	19	41	43		
01073	45	99	42		
01074	38	97	50		
01075	54	100	34		
01076	33	89	36		
01077	50	92	50		
01078	43	95	76		
01079	41	84	41		
01080	27	64	58		

TABLE 22

Test A, State University of Iowa
Post-test, 3/31/66, 10 3rd year students

Maximum Score	59	109	98		
STUDENT NO.	HISTORY	PHYSICAL	LABORATORY	DIAGNOSIS	TREATMENT
5102	38	97	37		
5103	47	89	31		
5104	51	95	32		
5105	18	-24	23		
5106	48	89	37		
5107	40	74	34		
5108	48	97	55		
5109	46	65	30		
5110	51	89	48		
5111	48	94	49		

TABLE 23

Test A, State University of Iowa
Post-test, 5/2/66, 10 3rd year students

Maximum Score	59	109	98		
STUDENT NO.	HISTORY	PHYSICAL	LABORATORY	DIAGNOSIS	TREATMENT
5114	46	96	28		
5115	29	86	26		
5116	53	99	33		
5117	41	91	45		
5118	52	95	28		
5119	31	42	45		
5120	45	73	36		
5121	50	91	39		
5122	53	102	46		
5123	47	64	32		

TABLE 24

Test A, State University of Iowa
Post-Test, 6/2/66, 11 3rd year students

Maximum Score	59	109	98		
STUDENT NO.	HISTORY	PHYSICAL	LABORATORY	DIAGNOSIS	TREATMENT
5100	32	31	23		
5101	51	94	53		
5124	44	65	21		
5125	54	93	32		
5127	51	103	54		
5128	53	97	34		
5129	52	96	47		
5130	54	93	54		
5131	54	93	32		
5132	54	99	31		
5133	51	91	52		

TABLE 25

Test A, State University of Iowa
Post-Test, 7/11/66, 13 3rd year students

Maximum Score	59	109	98		
STUDENT NO.	HISTORY	PHYSICAL	LABORATORY	DIAGNOSIS	TREATMENT
5126	54	57	3		
5134	30	74	40		
5135	30	47	33		
5136	53	88	27		
5137	41	97	6		
5138	22	30	46		
5139	45	99	26		
5145	51	104	63		
5140	52	86	23		
5141	40	89	32		
5142	39	88	19		
5143	20	49	15		
5144	40	68	40		

TABLE 26

Test A, University of Vermont
Post-Test, 5/16/66, 42 3rd year students

Maximum Score	59	109	98		
STUDENT NO.	HISTORY	PHYSICAL	LABORATORY	DIAGNOSIS	TREATMENT
6126	49	89	5		
6127	51	93	28		
6128	42	48	5		
6129	26	27	36		
6130	48	96	44		
6131	44	75	34		
6132	45	89	19		
6133	31	19	40		
6134	44	95	41		
6135	35	6	16		
6136	51	94	28		
6137	34	58	12		
6138	54	96	12		
6139	7	7	23		
6140	24	-3	56		
6141	9	80	42		
6142	35	94	7		
6143	-3	-20	29		
6144	-4	-18	29		
6145	22	34	42		
6146	49	34	28		
6147	50	64	44		
6148	54	100	27		
6149	42	-7	27		
6150	29	35	46		
6151	54	97	55		
6152	-6	-12	19		
6153	30	44	25		
6154	42	96	38		
6155	42	48	21		
6156	35	82	28		
6157	55	99	28		
6158	51	30	39		
6159	47	96	24		
6160	37	93	19		

TABLE 26 (Cont.)

Test A, University of Vermont
Post-Test, 5/16/66, 42 3rd year students

Maximum Score	59	109	98		
STUDENT NO.	HISTORY	PHYSICAL	LABORATORY	DIAGNOSIS	TREATMENT
6161	10	24	37		
6162	25	24	-11		
6163	46	84	43		
6164	50	96	47		
6165	7	-4	21		
6166	17	33	12		
6167	9	18	27		

TABLE 27

Test A, Medical College of Georgia
Post-Test, 5/23/66, 30 4th year students

Maximum Score	59	109	98		
STUDENT NO.	HISTORY	PHYSICAL	LABORATORY	DIAGNOSIS	TREATMENT
00730	20	18	15		
00731	31	85	39		
00732	55	101	43		
00733	17	32	32		
00734	31	22	33		
00735	52	94	40		
00737	53	99	35		
00738	-1	15	26		
00739	14	32	63		
00740	18	83	25		
00741	53	98	34		
00742	53	101	66		
00743	35	90	40		
00744	48	95	40		
00745	35	23	39		
00746	33	80	51		
00747	29	77	17		
00748	50	96	35		
00749	-4	21	19		
00750	-12	89	11		
00751	50	88	42		
00752	53	97	50		
00753	12	16	33		
00754	7	-32	18		
00755	49	97	11		
00756	31	54	24		
00757	41	84	35		
00758	46	80	14		
00759	36	18	40		
00760	49	98	36		